



FORT EGBERT AND EAGLE, ALASKA

❧ A PRESERVATION PLAN ❧

National Trust for Historic Preservation in the United States
740-748 Jackson Place, N.W.
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Prepared Under Contract for the Bureau of Land Management



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AND
EAGLE, ALASKA
A PRESERVATION PLAN

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United States Department of the Interior



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ACKNOWLEDGEMENTS

Development of a preservation plan for Fort Egbert and Eagle, Alaska, required the advice and support of many individuals and organizations. We are indebted to all those who were so helpful in the preparation of this plan.

George McMath, architect for the project, took a three months leave of absence from his regular practice in Portland, Ore., to be on site in Eagle for the duration of the 1975 summer field work. He has given the project great personal attention. Similarly, Joe Clark's fine report on the causes of building deterioration and recommended procedures for future conservation of wood materials has been a critical factor in developing a program for the Fort Egbert buildings. Steve Peterson, who served as construction supervisor during the summer of 1975, deserves special commendation for his careful attention to detail. Staff of the Bureau of Land Management were most helpful in making information available, in resolving logistical problems of obtaining supplies and materials and in providing transportation.

We are particularly grateful to the people of Eagle. Those individuals who worked on building stabilization at Fort Egbert are commended for their excellent efforts. The Eagle City Council and the Historical Society of Eagle provided special assistance during the summer of 1975, for which we thank them. Louise Waller, Eagle city clerk, and Tom Scott of the Historical Society of Eagle, provided helpful guidance in researching city and federal records and in unearthing old photographs of the town and the fort. Without the support of all the people of Eagle developing long-term recommendations for preservation would have been far more difficult.

John L. Frisbee, III, director
National Trust for Historic Preservation
Western Regional Office

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INTRODUCTION

Opportunities to preserve and protect historic environments that have survived the ravages of time and man with a minimum of alteration rarely occur. The preservation of Eagle, Alaska, is one such opportunity, one inextricably tied to the history and development of Fort Egbert. While Eagle has survived essentially in an unaltered condition, Fort Egbert is a fragment of an important military outpost that protected the interests of United States citizens and businesses in the remote Alaskan interior and contributed significantly to the construction and development of a major communications system.

In 1970, an Eagle Historic District, including Fort Egbert and the town of Eagle, was listed in the National Register of Historic Places, attesting to its historical significance. Both Fort Egbert and Eagle afford an important opportunity to preserve and interpret for the American public the history and development of interior Alaska. Both also provide an opportunity to determine feasible courses of action for the protection, preservation and management of other historic resources in remote environments.

Until 1975, ownership of property was divided among private interests, the town of Eagle, the Alaska Department of Highways and the Bureau of Land Management of the U.S. Department of the Interior. Today, property within the incorporated limits of Eagle is owned by private individuals and the town of Eagle. Lands within the original Fort Egbert Military Reservation are substantially under federal ownership and are administered by the Bureau of Land Management.

As the owner of property listed in the National Register of Historic Places, the Bureau of Land Management was obligated under the provisions of the National Historic Preservation Act of 1966 and federal Executive Order 11593 to assure the preservation of remaining structures and ruins at Fort Egbert.

Consequently, BLM took important steps to make certain that the five remaining buildings and numerous ruins at Fort Egbert would be immediately stabilized. In addition, BLM determined that short and long-term planning would be undertaken to assure proper treatment and disposition of this resource. BLM also realized the interrelationship of the fort and the town of Eagle and indicated that this interrelationship should be considered in the planning process.

To undertake immediate stabilization and short and long-term planning, the BLM received a congressional appropriation in fiscal year 1975. While the major portion of the funds was allocated for stabilization work during the summer of 1975, a contract of \$31,555 was awarded to the National Trust for Historic Preservation to provide architectural assistance for stabilization work and to develop preservation plans for Fort Egbert with complementary recommendations for the future development of historic resources in Eagle.

It is important to note that development of this project involved a marriage of federal, state and local governments working with private sector representatives to assure the success of the project. Bureau of Land Management staff drew together the expertise and preservation interests of the National Park Service, the Alaska State Historic Preservation Office, the National Trust for Historic Preservation, the town of Eagle and the Historical Society of Eagle. These diverse public agencies and private organizations worked toward a common goal in a spirit of cooperation.

This report presents findings and recommendations for stabilization and preservation at Fort Egbert and in Eagle. The report covers stabilization work undertaken through 1975 and contains recommendations relating to future preservation work in the town and at the fort. It includes a brief historical overview of Fort Egbert and Eagle, in part drawn from a paper by Melody Grauman of the National Park Service, with additional materials brought to light during field investigations in 1975. An analysis of additional research required for future preservation programming is followed by preliminary recommendations for interpretive development at the Fort Egbert/Eagle complex. An analysis of current land use at the fort with recommended changes in land use is followed by a plan and phased approach to the further stabilization, restoration and interpretation of Fort Egbert.

Future developments at Fort Egbert will clearly affect the town of Eagle. Parties involved in work at the fort all agreed that consideration must also be given the historical, cultural and social effects on the community. That section of the report relating to Eagle is not the definitive study of the town. The objective of the study was to evaluate the changes taking place in Eagle in recent years and to offer guidelines and recommendations for the community to follow, should they choose to place an emphasis on retaining the historical values of the town in future development. Nothing in this section should be misconstrued as mandatory for Eagle. The people of Eagle, collectively and individually, will determine their course of action. But we are hopeful that the suggestions put forward in this document will be helpful in that effort.

In this project an analysis was made of Eagle and its surroundings. From this analysis, certain conclusions were drawn about the physical fabric of the town and its setting and those critical elements that make Eagle a unique place were extracted. Based on these factors, guidelines were developed that may be helpful to individuals in building new structures and in improving existing buildings to assure that the basic town character is retained. Certain maintenance and building repair guidelines are recommended that may help to arrest the rate of deterioration in both old and new structures.

As a part of the project, a detailed stabilization and restoration plan for the Eagle courthouse was developed. A brief description of the work to be accomplished under the plan is in this report. Detailed plans and specifications will be a separate report to the town of Eagle and the Alaska State Historic Preservation Office. Brief recommendations for work on other public buildings in Eagle are included in this report as well.

In April 1975, the director of the National Trust Western Regional Office and George McMath, architect for the Fort Egbert project, journeyed to Eagle, accompanied by representatives of the Bureau of Land Management and the National Park Service. During a four-day period, preliminary evaluations were made of all the Fort Egbert buildings and documentary and photographic information was accumulated for later review.

A preliminary report, outlining the approach for detailed summer field investigation and stabilization work, was provided to the Bureau of Land Management in May 1975. A summer construction crew was hired and materials and supplies assembled for the summer stabilization project.

In early June, Joe Clark, a wood pathologist, visited Fort Egbert to investigate building conditions and recommend treatment for Fort Egbert's wooden buildings. His final recommendations are included in this report. Throughout the summer of 1975, stabilization work proceeded on four of the five surviving Fort Egbert buildings and additional research was gathered for development of short and long-term plans for preservation and restoration of the fort. At the same time, the National Trust western regional director and regional architect were in Eagle undertaking field research for the preservation and restoration of the Eagle courthouse. During the course of the summer, interpretive specialists, historians and archaeologists all visited Eagle and Fort Egbert to prepare for long-range preservation planning.

After the summer field investigations, McMath, Clark and John Frisbee, director of the National Trust Western Regional Office, worked with the Bureau of Land Management to develop recommendations for future stabilization and restoration at Fort Egbert and Eagle. This report is the result of a year's research and analysis. It is hoped that the report will prove to be a useful tool in the preservation of Fort Egbert and Eagle and that the experience gained will be helpful to the Bureau of Land Management in future preservation efforts in other remote areas.

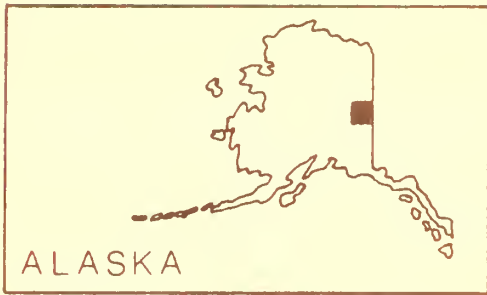
SUMMARY

The Eagle Historic District was placed in the National Register of Historic Places in 1970 for its importance in the development of interior Alaska. Eagle was the seat of the first civil government in the interior of Alaska and was the first incorporated town in the interior, while Fort Egbert played a significant role in the development of communications systems in the Far North.

Because Eagle and Fort Egbert are of such importance, a limited stabilization treatment of both historic areas should be an interim solution to arrest further deterioration. Remaining structures at the fort, the parade ground, walks, roads and fences should be restored to their original appearance. Ruins should be stabilized, sites identified and the former telegraph office reconstructed. In the long term, Fort Egbert should be the object of a full-scale preservation, restoration and interpretive program for the American public.

Restoration of Fort Egbert will draw visitors increasingly curious about the history and development of Alaska and increased visitor use will have a dramatic impact on Eagle. A program of restoration at Fort Egbert must be complemented by similar programs at Eagle. Using national, state and local financial resources when possible, publicly owned buildings in Eagle should be restored and new uses developed for those that have been vacated. Technical guidance and innovative financing programs for privately owned historic buildings in Eagle must be developed. Thought must be directed to the impact of increased population and visitor use on Eagle as it relates to new construction.

Problems that mutually affect Eagle and the fort should be mutually resolved. Short and long-term requirements for parking and tourist-related facilities should be examined and solutions to potential problems developed. We hope that the recommendations of this report will provide a working frame of reference to guide future stabilization, restoration and new development at Fort Egbert and Eagle.



STUDY AREA

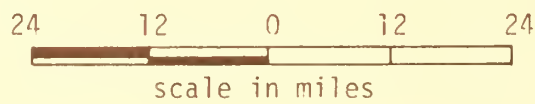
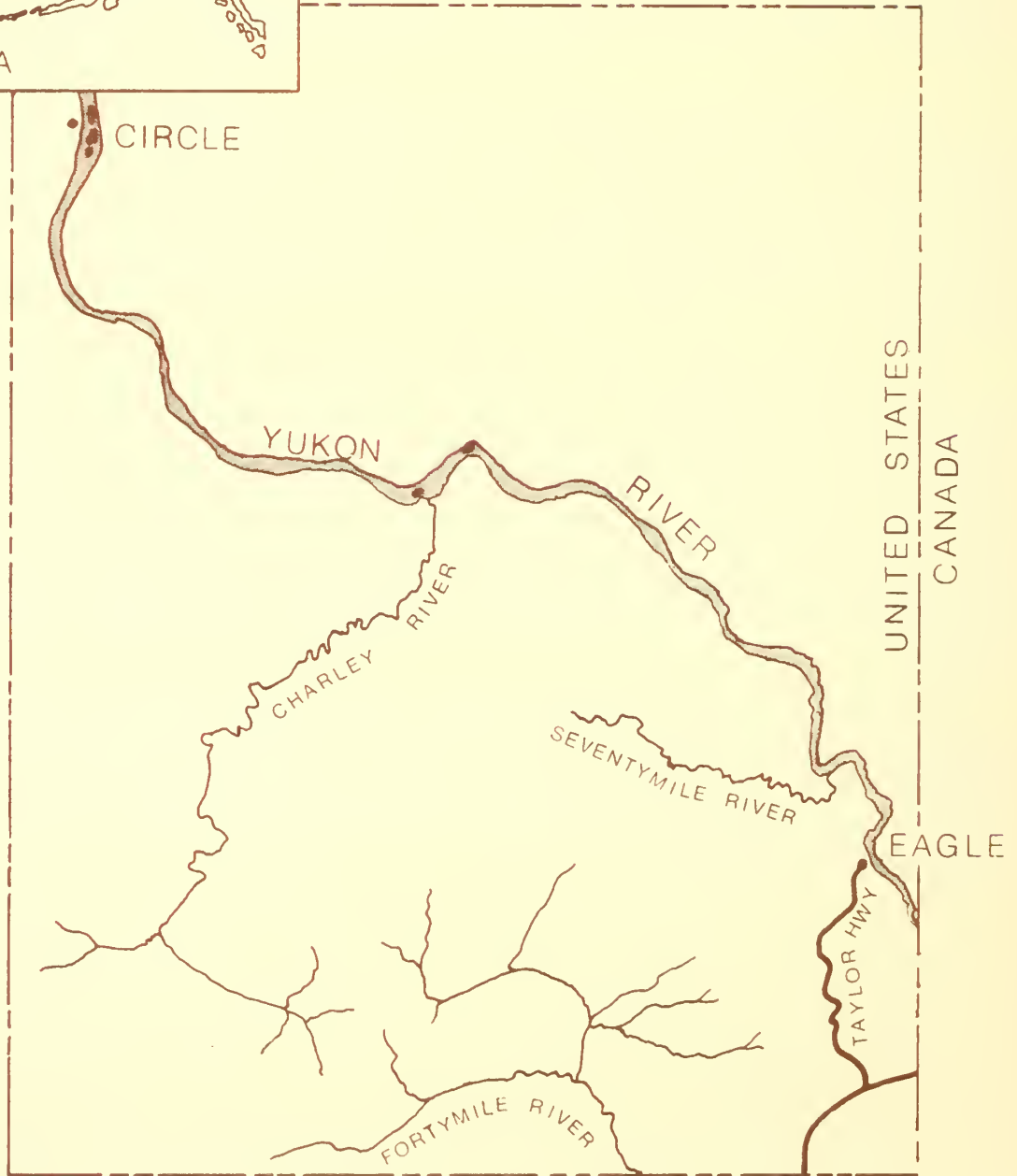


EXHIBIT 1

CHAPTER 1

EAGLE AND FORT EGBERT: A HISTORICAL OVERVIEW

LOCATION, POPULATION AND DEVELOPMENT

Eagle and Fort Egbert are located in central eastern Alaska at the point where Mission Creek joins the Yukon River. The community is approximately 12 miles west of the Canadian border of the Yukon Territory. Both the community and the fort are situated on a level plain at an oxbow in the Yukon River. The plain is enclosed by low hills and mountains to the west and north, the most prominent feature being Eagle Bluff, rising 800 feet at the confluence of Mission Creek and the Yukon River.

By road Eagle is 162 miles north of Tetlin Junction, at the northern terminus of the Taylor Highway, an improved gravel and earth roadway that is open for use from late April or early May through late September or early October.

Eagle is serviced by highway during the summer months and by air year around. It formerly was served by steamboat on the Yukon River, until such operations ceased in 1947.

The town population varies depending on the season. The winter population is between 50 and 75, while in summer this figure rises to approximately 200. Eagle Village, a nearby native village, has a population of approximately 70.

Services available in Eagle include one roadhouse providing room and board, a general store, gasoline pumps, sporting goods store, customs and postal service and a Bureau of Land Management campground for transient use in the summer months. Emergency radio service is available through the BLM fire network.

Temperatures at Eagle vary from a summer high of approximately 95° F to a winter low of -75° F. Precipitation is low, amounting to 11-14 inches annually.

The first recorded people in the area of Eagle and Fort Egbert were the Han Indians, a branch of the Athapaskans. While the Hans had been in contact with white fur traders prior to 1850, it was not until the latter quarter of the 19th century that the Hans at David Camp (now Eagle Village), located three miles from Eagle, had significant or continued contact with the white man.

While fur trading was the impetus for initial contact, it was gold that brought the white man to the Upper Yukon in significant numbers in the late

19th century. By the early 1880s, the search for gold brought prospectors into the area and the various trading companies operating in the interior of Alaska reoriented their primary commerce from the Indian fur trade to supplying the miners. For a period during the 1880s, a French Canadian trader, Moses Mercier, operated a trading post at Belle Isle (the site of present-day Eagle) for the Alaska Commercial Company, at the time the dominant fur trading company in Alaska.

With the discovery of gold at Franklin, Fortymile, Circle City and Dawson, the business of supplying miners on the Upper Yukon boomed. Various trading companies, with their own shallow draft river steamboats, navigated the Yukon, supplying trading stations along the river. New companies were established to compete with the Alaska Commercial Company, the primary competitor being the North American Trading and Transportation Company (NAT&T Co.), organized in 1892. Both companies were later to be significant factors in the initial development of Eagle.¹

The expansion of mining during the 1890s brought the problems of law and order to the Alaskan interior. This, combined with other factors, primarily a United States Army policy of fostering the development of the West, provided the impetus for a military reconnaissance of the Upper Yukon. On August 4, 1897, the Secretary of War ordered Capt. P.H. Ray and Lt. W.P. Richardson of the 8th Infantry to investigate the Yukon and to make recommendations for future Army activity. They were specifically ordered to consider the need for troops, identify possible fort locations and to analyze the communications system, capability of civil government, permanence of settlements and other matters of military, civil and commercial interest. Capt. Ray was additionally ordered to investigate rumors of starvation at Dawson and Circle City.

Ray's report subsequent to his Alaskan visit had considerable impact on the Upper Yukon at the turn of the century. He determined that the large transient population could not be adequately controlled by "vigilante"-type justice or by civil government, because of the impermanence of public officials. In addition to the protection of the civilian population, Ray considered the Army's mission in Alaska to include exploration and development of new routes to the interior, improvement of communications, provision of aid to the destitute and protection of the trading companies. Ray also concluded that a military presence was required to protect the flow of supplies along the Yukon River.

The search for gold always had first priority. Communications were virtually nonexistent and laws were not enforced. Ray therefore recommended a semi-military government for northern Alaska. His recommendations of February 1898 included the establishment of three military posts--at St. Michael,

¹ John L. Healy organized the NAT&T Co. and Portus B. Weare provided some of the backing for the company. Some insight may be given to the significance the company placed on Eagle as a major trading center by the company's agents in Eagle (A.L. Healy and Eli Weare), relatives of the two founders of NAT&T.

at the junction of the Tanana and the Yukon rivers and at the junction of the Yukon and Mission Creek (Fort Egbert), all of which were subsequently built.

Mission Creek was selected because of its level site well above high water, the availability of construction timber and proximity to the border for control of smuggling. Ray added that the site was away from the mining towns, a factor he considered advantageous. But within three months of Ray's report, in May 1898, a small group of miners established a new community near the confluence of Mission Creek and the Yukon, calling it Eagle City, presumably in recognition of the bald eagles nesting on a nearby bluff. A townsite was laid out in a grid pattern, cabin sites allotted to the original settlers and the remaining sites sold as demand increased.

Eagle City was typical of frontier communities established on the unstable basis of mining. It grew quickly; one report states to a population of 1,700 by the fall of 1898. Its population disappeared with equal speed, dropping to 300 by the winter of 1900, as gold was discovered elsewhere in Alaska.

Similar to other communities throughout the West, Eagle initially developed with an appearance of impermanence. In the absence of a sawmill, simple 15' by 18' log cabins were quickly erected. Furniture was crudely made and glass for windows was scarce, necessitating the use of cheesecloth for covering windows. Dirt was placed over board or pole roofs as insulation against the harsh northern winters.

The construction of Carl Johanson's sawmill in 1898, combined with development of new commercial establishments by the Alaska Commercial Company (AC Company), the NAT&T and the Alaska Exploration Company, brought certain previously unknown amenities to Eagle City. The quality of the cabins improved as sawed lumber and sawdust insulation became available. At the same time, manufactured furniture, glass for windows and carpets for floors began to be received by the trading and supply companies.

DEVELOPMENT OF THE FORT

The scene that greeted Ray on his return to Eagle in early 1899 was far different from that which he had left a year before. On March 1, 1899, Ray, now a major, advised the assistant adjutant general at Vancouver Barracks (Washington State) that he had located a suitable site for construction of the fort. In the absence of an official civil government, he recommended that Eagle City be included within the Fort Egbert military reservation until such time as a civil government could be established. On Ray's recommendation, therefore, Eagle was included within the military reservation.

In mid-March, Lieutenant Richardson with a detachment of 25 men was dispatched to Eagle to begin construction of the initial phase of Fort Egbert. He was ordered to erect a barracks for 60 men and two officers and

storehouses and accessory buildings as necessary. Richardson² was told that all buildings were to be constructed of logs. On June 7, 1899, the post was officially named Fort Egbert in honor of Harry C. Egbert, an infantry colonel killed in action in the Philippines, March 26, 1899.

The town, laid out prior to establishment of the military reservation, extended into what was to become the fort. Consequently, 38 cabin sites were acquired by the Army for full development of the fort, not without protest from some local residents. Initial fort construction under Richardson's direction proceeded slowly and on Major Ray's arrival in late summer, it was clear that the pace of construction would have to increase in order to provide adequate shelter before winter. Ray even purchased an electric lighting outfit so that construction could continue during the dark winter months. By year's end, a barracks, no. 21 (numbers indicate buildings as shown in Exhibit 2 and later exhibits); three officers' quarters, nos. 1, 3 and 5; post commissary, no. 12 (later quartermaster's storehouse); hospital, no. 20; bakery, no. 22; sawmill, no. 23; and quartermaster's warehouse, no. 11; were built. With the exception of the corrugated iron bakery and sawmill, all buildings were constructed of logs. Subsequent buildings were frame or milled construction. Because of the conditions and the requirements to construct shelter rapidly, these first buildings were poorly built and required refurbishment within a year.

Construction in 1900 proceeded at a slow pace until the arrival of Capt. Charles Farnsworth, an able commander who quickly brought order out of apparent chaos and poor morale. The barracks, on orders, had been built for only 60 men, far from adequate for the 102 enlisted troops who accompanied Farnsworth. An addition was placed on the building and by the year's end, eight new structures had been erected--an administration building, no. 6; a guardhouse, no. 7 (later used as an extra icehouse); an icehouse, no. 10; a stable, no. 14; two noncommissioned officers' quarters, nos. 18 and 19; a civilian employees' quarters, no. 24; and a post exchange, no. 32 (later Signal Corps barracks).³ The latter building was constructed without expense to the military, primarily because Captain Farnsworth felt it important to provide entertainment other than Eagle's saloons for the troops.

² Richardson soon rose to prominence in Alaska as the head of the Alaska Road Commission. A significant figure in the development of transportation systems in Alaska, the Richardson Highway, extending from Valdez to Fairbanks, is named for him.

³ Various documents from the National Archives, especially post quartermaster reports, maps and photographs, occasionally contradict one another. As the fort grew, building designations also changed from time to time. This appears to have been the case with the post exchange. Later maps designate the post exchange as building no. 30, constructed in 1904-05. Adding to the confusion is the fact that its dimensions are the same as building no. 32. In 1900, the post exchange appears to have been designated no. 25, later used to identify the civilian engineers quarters. The 1900 post exchange was apparently built by Bryan and Powers of Eagle, for in 1905, it was sold by them to the Army for use as a Signal Corps barracks.

The spring of 1901 brought additional construction to the fort. Troops completed a commissary, no. 8; a powder magazine, no. 9; and development of a new target range to replace a former facility destroyed by the spring breakup of ice on the river. It was during this period, too, that the fort became a significant element in the development of Alaskan communication systems, undoubtedly the most important historical event associated with Fort Egbert.








Physical development of the fort continued at a steady pace, and by 1906, additional new buildings included three sets of double officers' quarters, nos. 2, 4 and 28; a workshop, no. 13; wagon shed, no. 15; an additional NCO quarters, no. 16; alterations to existing NCO quarters, nos. 18 and 19; a granary, no. 17; another addition to the barracks, no. 21; a new bakery, no. 22, to replace one destroyed by fire in 1904; engineer's quarters, no. 25; commissary warehouse, no. 26; oil house, no. 27; telegraph office, no. 29; a new post exchange, no. 30; a hay shed, no. 31; guardhouse, no. 33; a new hospital, no. 34, allowing conversion of the old hospital, no. 20, to use as a laundry; and a tank house, no. 40, for full development of the Fort Egbert water supply system from Mission Creek. By 1906, the fort complement had reached its full growth, including 10 officers, 147 enlisted troops, 21 horses, 60 mules and some 30 dogs.

After 1906, several additional buildings were constructed, including either construction or expansion of the firehouse, no. 44; a hospital sergeant's quarters, no. 35; post gymnasium, no. 36; a straw shed, no. 37; and other sheds and work buildings. By 1909, with construction of the gymnasium, the fort reached its full physical growth, although by that time it was clear that the need for a large military complement at Fort Egbert was declining. The telegraph, having been converted to wireless, no longer required the personnel it formerly required. Fairbanks had surpassed Eagle in importance and the need for a military presence to protect civilian populations no longer existed. In 1910, the Army reduced the fort complement to two officers and 35 men, and the next year the infantry departed, leaving a small Signal Corps detachment to man the Fort Egbert five-kilowatt wireless station. A small hospital detachment remained as well for several years, and the Signal Corps continued to operate the wireless station into the early 1930s.






The next 20 years evidenced the gradual decay of Fort Egbert. In 1915 an NCO quarters, no. 18, was transferred to the U.S. Treasury Department for use as a customs house and was moved to Front Street in Eagle. By 1925 a portion of the military reservation had been turned over to the Alaska Road Commission and except for a small Signal Corps reservation, the remainder was granted to the U.S. Interior Department. While the Alaska Road Commission (ARC) used several buildings to house personnel and equipment, many of the buildings were sold or salvaged by the ARC and Eagle residents. During the late 1920s and early 1930s a number of buildings were demolished or salvaged to clear space for an airstrip, which was laid out diagonally across the former Fort Egbert parade ground. By 1940, the only buildings remaining of the more than 45 existing in 1911 were the stable, granary, water wagon shed, one quartermaster's storehouse and one NCO quarters.

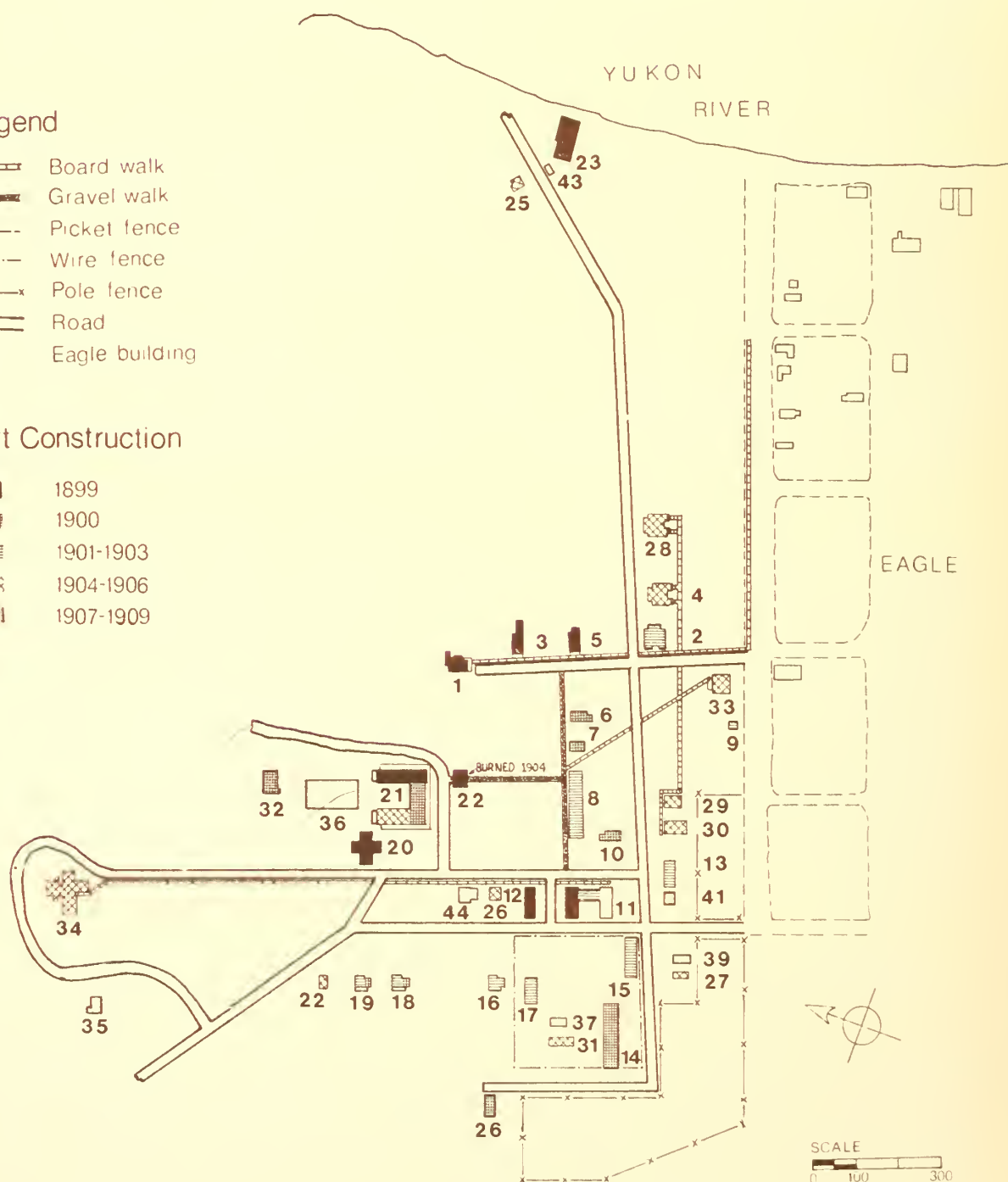
Fort Egbert Development: 1899-1909

Legend

-  Board walk
-  Gravel walk
-  Picket fence
-  Wire fence
-  Pole fence
-  Road
-  Eagle building

Fort Construction

-  1899
-  1900
-  1901-1903
-  1904-1906
-  1907-1909



KEY TO FORT EGBERT BUILDINGS

- 1-Commanding Officer's Quarters
- 2-Lieutenant's Quarters
- 3-Captain's Quarters
- 4-Lieutenant's Quarters
- 5-Captain's Quarters
- 6-Administration Building
- 7-Ice Storage (original guardhouse)
- 8-Commissary
- 9-Powder Magazine
- 10-Ice House
- 11-Quartermaster Storehouse
- 12-Quartermaster Office and Storehouse
- 13-Workshop
- 14-Stable
- 15-Wagon Shed
- 16-Noncommissioned Officer's Quarters
- 17-Granary
- 18-Noncommissioned Officer's Quarters
- 19-Noncommissioned Officer's Quarters
- 20-Laundry (original hospital
- 21-Enlisted Men's Barracks
- 22-Bakery
- 23-Sawmill
- 24-Civilian Employees' Quarters
- 25-Engineer's Quarters
- 26-Commissary Warehouse
- 27-Oil House
- 28-Lieutenant's Quarters
- 29-Telegraph Station
- 30-Post Exchange
- 31-Hay Shed
- 32-Signal Corps Barracks (original post exchange)
- 33-Guardhouse
- 34-Hospital
- 35-Hospital Sergeant's Quarters
- 36-Gymnasium
- 37-Straw Shed
- 38-Pump House (not on this exhibit)
- 39-Oil House
- 40-Tank House (not on this exhibit)
- 41-Coal and Lumber Shed
- 42-Unidentified Building (not on this exhibit)
- 43-Heater House
- 44-Firehouse
- 45-Old Pump House

Partial standing ruins of the second post hospital and the Signal Corps barracks also were evident, although both had been partially salvaged.

FORT EGBERT AND THE DEVELOPMENT OF COMMUNICATIONS IN ALASKA

The greatest significance of Fort Egbert is its role in the development of communications systems in Alaska, primarily through the construction of the Washington-Alaska Military Cable and Telegraph System (WAMCATS) and through the association with an important military figure (William Mitchell) in that construction project.

The development of adequate systems for rapid signal communications was an important military goal, carried out by the U.S. Signal Corps. The corps, originally organized during the Civil War, was reorganized by communications expert Gen. Adolphus Washington Greely in 1887. At the turn of the century, it could take as long as a year to send a message to Alaska from Washington, D.C., and receive a reply. Greely, therefore, placed considerable emphasis upon developing signal communications systems in Alaska. In 1898, an exploration team searched for practical telegraph routes between the Yukon (in the vicinity of Fort Egbert) and Cook Inlet or Prince William Sound. While a system was established by 1900 from Fort Egbert to the United States through Canada, Greely wanted an all-American line to replace the international line. Farnsworth, before his transfer from Fort Egbert, had completed a segment to Dawson and construction had begun on an American line to the south. With Farnsworth's departure, however, construction came to a virtual halt. Concerned about the progress of the system, Greely sent a young veteran of the war in the Philippines, Lt. William "Billy" Mitchell, to Alaska to investigate the problems and to recommend solutions.

Surveying the Fort Egbert-Fort Liscum route during the summer of 1901, Mitchell quickly discovered the problem to be primarily that of transporting supplies. Deep moss and swamp muskeg in which mules sank to their knees covered the route. Transportation during the summer was almost impossible. However, in the winter with the ground frozen, one mule could pull a sled of 2,000 pounds.

By recommending winter labor to General Greely, Mitchell ignored old-timers' tales of freezing and myths that had grown concerning winter. After hearing Mitchell's report and recommendations, Greely ordered him to return to Alaska and to build the telegraph line.

After a winter reconnaissance over the trail, Mitchell organized his transportation system. Carefully selecting properly matched dog teams, Mitchell started a cache system along the trail. When the mule skinnners refused to follow, he simply paid them off and hired new ones. When he discovered Fort Egbert's inadequate supplies, he bought or made new equipment.

Mitchell proved a strong and tireless leader; he personally conducted all reconnaissances, led the crews on their first trip and made constant inspection tours. To prevent complaints and discontent while working in sub-zero temperatures, he prohibited thermometers. In addition, Mitchell established a wheelwright's shop at Fort Egbert to make specially modified sleds, harnesses and horseshoes. He even worked out a schedule that showed a sled's specific load in accordance with a specific temperature.

During the summer of 1902 Mitchell's crew erected the telegraph line onto the poles, dried salmon for winter dog food, hunted caribou and cached the meat and built stations 10 to 20 miles apart each with a telegraph office, cabin, stable and storehouse. On August 24, 1902, at Tanacross Junction the Fort Liscum line linked up with the Fort Egbert line. However, the most difficult job lay ahead.

The construction of the telegraph system from St. Michael to Fort Gibbon had bogged down in attempts to follow the Yukon to Fort Egbert. Mitchell determined that the best route would be to follow the Tanana River, then up the Goodpasture River to Kechumstuk Summit and link into the Fort Liscum-Fort Egbert line.

Time ran tight when the Tanana crew working east failed to meet Mitchell at the appointed spot. Only 30 days remained before the scheduled end of appropriations on June 30, 1903, yet 65 miles remained to be surveyed, the right-of-way cut and the line stretched and erected. But the job was completed on June 27, 1903, three days before the deadline, when Mitchell himself made the last connection on the Alaska Telegraph System. Two thousand miles of wire stretched from Nome to St. Michael to Fort Egbert to Fort Liscum.

Completion of the system provided rapid communications from Washington, D.C., to Alaska. Considering the vast undeveloped land area over which it crossed, linking of the telegraph line was a major construction project at the turn of the century. After construction, the line required continued maintenance and repairs. It had in fact become obsolete within a few years with the development of wireless transmission. By 1908, the Signal Corps was operating a wireless station at Fort Egbert and the land lines gradually fell into disrepair. Even after general abandonment of Fort Egbert by the infantry in 1911, Fort Egbert continued to serve a useful communications purpose for more than 20 years, linking this remote Yukon community with the outside world.

DEVELOPMENT OF EAGLE

After its initial development in 1898, the population of Eagle City experienced a steady decline for almost 60 years. A number of important events associated with the community, however, have given it a significant

place in Alaskan and American history. Today those events have sparked a new interest in Eagle and the result has been a population increase.

While Eagle was initially settled as a mining town, and served as a supply center for prospectors and miners in the region, mining actually played a smaller role in the development of the community than did its commerce on the Yukon River, its role as a governmental center and its association with the famous explorer Roald Amundsen's conquest of the Northwest Passage.

While Eagle was administered under military government initially, that governmental structure lasted less than two years. In the absence of proper civil authority, politicians and commercial interests applied pressure on the United States Congress to pass criminal and civil codes for Alaska. The codes provided for taxation, licensing, incorporation and established three judicial districts. As a result, in July 1900, military jurisdiction over Eagle came to a halt and the machinery for civil government was established.

Eagle served as the headquarters of the Third Judicial District in Alaska and was allowed to incorporate and establish its own local government. Shortly after passage of the codes, James Wickersham, appointed the first judge of the Third District, arrived in Eagle and began the process of establishing civil government. With income from license fees for saloons and other businesses, Judge Wickersham set about building the first United States courthouse in the Alaskan interior. He drew up plans and specifications, let a contract and arranged with the military to use its sawmill to mill lumber for the courthouse. The original courthouse and jail were completed on April 22, 1901, at a cost of \$8,000. Eagle then assumed an important position as the initial seat of civil government in the interior of Alaska.

In 1900, Eagle reported a population of 458 and an economic output of \$750,000. Toward the end of that year, the town petitioned Judge Wickersham to allow incorporation, which was approved following a vote by Eagle residents. Thus, on February 9, 1901, Eagle became the second incorporated city in Alaska and the first in the interior. (Exhibit 3 shows Eagle and Fort Egbert c. 1910-1911.)

The citizens proceeded to elect a council and mayor, passed local ordinances, provided for a school, hired a school teacher and renovated an unfinished cabin for use as a city hall. A high turnover rate of council members, especially of persons going "outside" when the cold winter set in, made orderly administration of city affairs difficult.

For a time, it appeared that Eagle would become the metropolis of the Yukon. In addition to its role as a major supply center for Yukon miners and as a staging ground through Fort Egbert for the telegraph, Eagle anticipated construction of a railroad and a highway, linking the Yukon with Valdez on Prince William Sound. But it was not to be. The Fairbanks gold strikes led to rapid growth of that community, and transportation systems anticipated for Eagle were directed there instead. In 1904, Eagle suffered another blow when headquarters of the Third Judicial District were moved to Fairbanks and the Eagle courthouse was relegated to a secondary role, manned by a United States commissioner and deputy United States marshal.

AMUNDSEN AND THE NORTHWEST PASSAGE

Despite the loss of judicial headquarters, Eagle was still the principal city on the Alaska Yukon and continued a quiet lifestyle. Suddenly on December 5, 1905, Eagle City flashed into the international news. Norwegian Roald Amundsen, the first man to negotiate the Northwest Passage, had mushed a dog-team 500 miles to telegraph his achievement from Fort Egbert.

The tall, gaunt Arctic scientist had strong determination and faith in his project. Rather than press his claims for appropriations from the Norwegian government, Amundsen defrayed most of his own expenses. Outfitting a small but stoutly built walrus sloop, the Gjoa, with a small petroleum engine and supplies for four years, the crew of eight men set sail on June 1, 1903, to establish the existence of a Northwest Passage and, at the same time, to verify or redetermine the exact location of the magnetic North Pole. Without resorting to blasting, Amundsen skillfully navigated from Godhaven, Greenland, to Boothia, Canada, where he located exactly the magnetic North Pole. From Boothia, Amundsen went on to King's Point (near Herschel Island) where the Gjoa wintered in MacKenzie Bay.

Capt. William Mogg of the whaling ship Bonanza offered to outfit an expedition to Fort Egbert, the nearest telegraph office. Without funds but filled with great eagerness to tell the world of his accomplishment, Amundsen reluctantly accepted the offer. Finally, after six weeks, with the temperature at 60 degrees below zero, he and his dogsleds arrived at Fort Egbert.

From around the world telegrams swamped the Fort Egbert station. Scientists proclaimed Amundsen's expedition as one of the most important scientific expeditions of the century. For three centuries explorers with the resources of wealthy nations behind them had failed to find the Northwest Passage.

Amundsen was encouraged to make a protracted stay at Fort Egbert where he was the guest of the Northern Commercial (NC) Company's resident manager, Frank N. Smith. His three-year voyage topped by the exhausting dogsled trip demanded a two-month recuperation. Finally, on February 13, 1906, with medicines for the stranded American whalers on the Bonanza, Amundsen left Eagle. The return trip to his ship proved uneventful and considerably easier for Amundsen than the trip to Eagle. With ice breakup, the Gjoa continued its voyage to San Francisco where it remained as a monument to Amundsen's historic voyage.

EAGLE: 1911 TO TODAY

With the abandonment of Fort Egbert in 1911, the economy of Eagle was further upset and the process of decline continued. Eagle tried to regain status as the Yukon terminus of the Northern Navigation Company riverboat

line, but was turned down in this effort. Where the community once automatically attracted river commerce, by 1911, Eagle was a community without a base to attract such business. The population slipped below 200 and many businesses were abandoned in the early 1920s. The Northern Commercial Company, created by consolidation of the Alaska Commercial Company with its competitors at the turn of the century, bought out most of the independent businesses.

As Eagle's economic base eroded in the 1920s and 1930s, its population dropped and by 1950 there were only 55 people and by 1960, fewer than 20. In 1954, the recently renovated and expanded school closed because there were not enough students. Through this decline, however, Eagle never lost its status as an incorporated city. Today, Eagle and Fort Egbert are experiencing a renewed public and private interest; the population is again increasing and an interest in the history of the fort and the town is bringing tourists to this remote community on the Yukon.

Eagle and Fort Egbert both played a significant role in the turn of the century development of the Alaskan interior. Because of its location on the Upper Yukon near the Canadian border, Eagle assumed an important role as a customs station on Alaska's most important highway, the Yukon River. Its location gave it temporary prominence as a commercial center, supplying the Upper Yukon miners, until new gold discoveries elsewhere in Alaska siphoned off the miners and prospectors. Following enactment of the criminal and civil codes in 1900, Eagle was the logical location for the first headquarters of the Third Judicial District. Eagle was the first incorporated community in the interior and the second within the territory. Eagle's association with Roald Amundsen and his conquest of the Northwest Passage provide the community with an element of international significance.

Of the forts established along the Yukon, little remains to remind us of the role of the military in the opening of the Alaskan interior. Fort Egbert is a fragment of the post that operated from 1899 to 1911. But the fort played an important role in bringing law and order to Alaska until civil government could be established and transportation and communication systems developed. Most significantly, Fort Egbert was important to the development of WAMCATS, the telegraph, and later, the wireless system that linked Alaska to Washington, D.C., and assured rapid communication for the first time between those points.

The Eagle/Fort Egbert Historic District is of more than local significance. However, further research must be carried out to clearly identify the roles of these two communities in American history. Once such research has been completed, the district should be carefully evaluated for its potential as a National Historic Landmark.



Figure 1. Eagle (left center) and Fort Egbert (right center) photographed from Eagle Bluff c. 1907. (Alaska Historical Library, Juneau)

Figure 2. Front Street, Eagle, as it appeared 1900-1904. Commercial and trading company buildings were located there. (Scott)



Figure 3. Fort Egbert sawmill, 1900. (National Archives)



Figure 4. Fort Egbert, about 1907, looking northwest to the Yukon River and Eagle Bluff. (Scott)



Figure 5. Water wagon used to transport water from Mission Creek to Fort Egbert prior to installation of the fort's water system. (National Archives)

Figure 6. Infantry troops on the Fort Egbert parade ground c. 1906. Buildings are (l. to r.), the quartermaster storehouse, commissary warehouse, NCO quarters and the post bakery. (Scott)





Figure 7. Original post hospital, 1900. With construction of a larger hospital in 1906, this building was converted to a post laundry. (National Archives)



Figure 8. Post administration building and guardhouse with commissary under construction, 1901. Exterior was sheathed in corrugated iron after carpentry work was completed. (National Archives)



Figure 9. Muster of Co. L, 7th Infantry, in front of the enlisted men's barracks, 1900. Typical of the earliest Fort Egbert buildings, the barracks were constructed of log and later sheathed with drop siding. (National Archives)

Figure 10. Looking north-east across Fort Egbert parade ground to the Yukon River. Original log barracks (left) with first post bakery. (National Archives)



Figure 11. Lt. (later, General) Wm. Mitchell, stationed at Fort Egbert 1901-1902, was a moving force in the construction of the telegraph line. "Billy" Mitchell later rose to prominence as a major promoter of a strong U.S. air force. (National Archives)

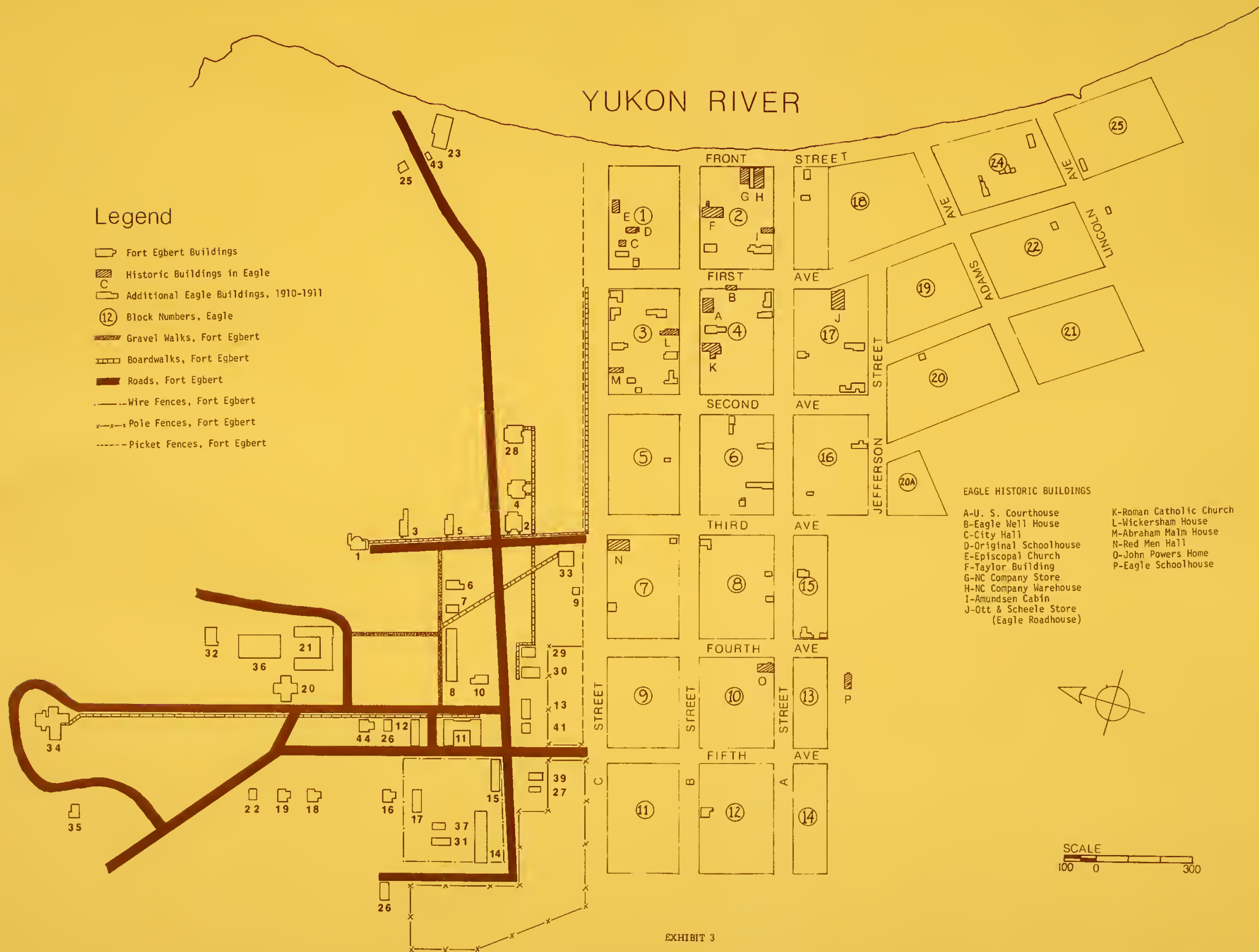


Figure 12. Infantrymen from Fort Egbert clearing the right-of-way for the Washington-Alaska Military Cable and Telegraph System lines, 1901. (National Archives)

Figure 13. United States courthouse, Eagle, the first courthouse in interior Alaska. It served as the headquarters of the Third Judicial District from 1900 to 1904. (Scott)



Eagle/Fort Egbert: 1910-1911





CHAPTER 2

A PLAN FOR FORT EGBERT

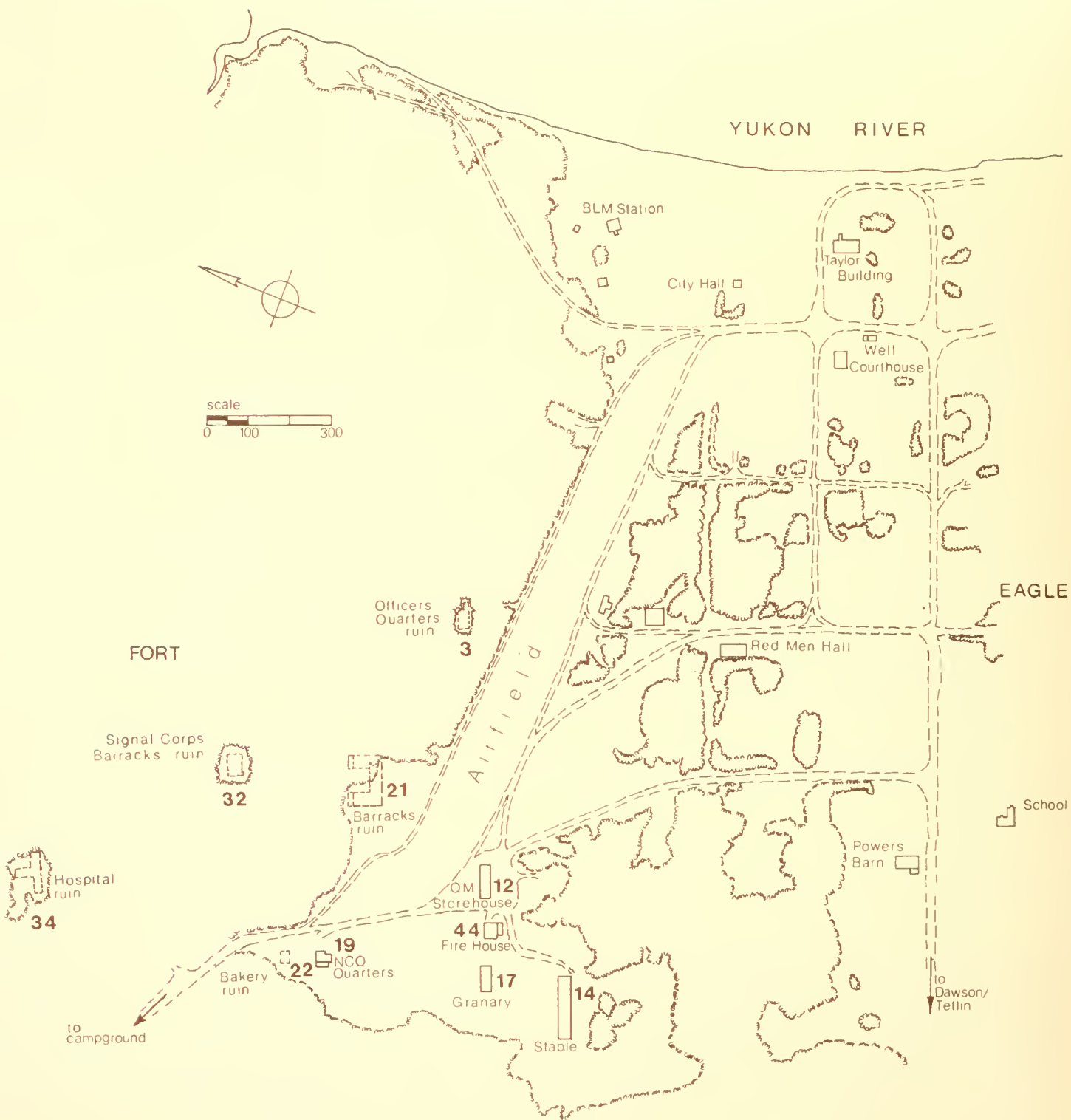
HISTORICAL RESEARCH

Preliminary investigation was made of documents and photographs relating to the history and development of Eagle and Fort Egbert. Melody Grauman, a historian with the National Park Service, prepared an initial history of the fort and the town. However, further records searches are necessary prior to development of interpretive planning and actual building restoration at the fort. Among the records requiring further search are those of the Third Judicial District of Alaska, the Alaska Road Commission, the U.S. Signal Corps and the U.S. Department of Justice. Records of the town of Eagle, minutes of the Eagle City Council, letters and records of the deputy United States marshal in Eagle, various company records and records of deeds and wills for the town must also be searched. An oral history project in Eagle is recommended since a number of persons who settled in the community during its early days still are there. Though sufficient information is available to proceed with stabilization of buildings at the fort, restoration and interpretation will be based on additional research findings.

An expansion of historical research during fiscal year 1976 with the goal of completion of such research in fiscal year 1977 is recommended.

HISTORICAL ARCHAEOLOGY

As part of a total research program at Fort Egbert, archaeological investigation of sites, ruins and the perimeters of existing buildings is warranted. (Exhibit 4 shows Fort Egbert in 1975.) At the height of its development, Fort Egbert had some 45 buildings specifically identified by number and use, plus an unspecified number of subsidiary structures, such as latrines and heater houses. Of the 45 major structures, only five remain today: the stable (mule barn), granary, water wagon shed (firehouse), quartermaster's storehouse and an NCO quarters. Substantial aboveground ruins of buildings survive including the post hospital and several heater houses. Badly deteriorated aboveground ruins remain at the commandant's quarters, an officers' quarters, post laundry, enlisted men's barracks, bakery, Signal Corps barracks, civilian employees' quarters, gymnasium and hospital sergeant's quarters. At the remaining sites, there are visible depressions in several instances. However, at approximately 25 building sites there is little or no aboveground evidence.



FORT EGBERT: 1975

EXHIBIT 4

For purposes of archaeological investigation, sites have been assembled in several categories--sites containing intact structures, sites with above-ground remains and sites without aboveground remains. In addition to building sites, there are sites formerly occupied by roads, gravel paths, boardwalks, flagpoles and fences.

Sites with Structures. Required stabilization work during the summer of 1975 meant the disturbance of soil on the perimeters of existing buildings, with the exception of the stable, which was not stabilized at that time. However, several inspection holes were dug at the stable to determine the extent of foundation decay.

The project plan called for preliminary archaeological investigations so as to determine the best way to go about that work and to develop a scientific approach to dealing with artifacts discovered during the 1975 summer season. Unfortunately, such investigation did not occur. But those materials discovered during the 1975 season were labeled and records made indicating as precisely as possible where they were found.

Because of the soil disturbance caused by 1975 field work, we do not believe immediate investigation at any extant building site will be warranted, except at the stable. However, ultimate plans anticipate removing the water wagon shed to its original position and investigation of the original location is recommended before the building is replaced on its site.

It is realized that concern was expressed because archaeological investigation did not take place prior to building stabilization. Great care was exercised during 1975 field work to limit soil disturbance. To avoid potential violations of either the Antiquities Act of 1906 or the National Historic Preservation Act of 1966, an archaeological plan should be developed and excavation begun prior to further building stabilization work, which should be done on a priority basis. Staff of the Bureau of Land Management should develop guidelines for job foremen working at Fort Egbert to assure that compliance with all federal and state legislation is met prior to further building or site work. It is strongly urged that a qualified archaeologist investigate the perimeter areas of the stable early in the summer of 1976. It should also be noted that the Alaska Road Commission graded most areas around extant buildings prior to 1975, action that may have obliterated surface evidence of some structures.

Sites with Aboveground Ruins. At these sites, the amount of surviving material varies considerably from site to site. The post hospital, civilian employees' quarters, post laundry, enlisted men's barracks and Signal Corps barracks have extensive remains. These sites must be photographed and ground plans made to scale in their "as found" condition, prior to any site work. Subsequently, removal of plant material within building perimeters is recommended at most sites. In the case of the post hospital, Signal Corps barracks and surviving heater houses, elevations of existing above-ground remains, following Historic American Buildings Survey standards, should be made by a qualified architect or architectural student under the guidance of a qualified architect.

Archaeological investigation of ruins with extensive aboveground remains should be undertaken with extreme care. Archaeology should be limited to work necessary to determine locations of now obscure additions or outbuildings and to defining building perimeters. Since surviving members at these sites cannot, in general, be preserved and stabilized for a great period of time, the remains should be left intact, made sufficiently safe to eliminate visitor hazards and interpreted to the public in their "as is" condition. After recording of all surface evidence and excavation of perimeters of ruins, extensive investigation of such sites should be left for a future time, when building remains have deteriorated to the point where they are not clearly recognizable to the visiting public. The interpretive value of surviving original material is always greater than the value of a contemporary replacement. Such an approach, however, creates a potential for site vandalism by tourists and will necessitate a good visitor control program by BLM staff during times of peak visitor traffic.

At several of the sites with limited aboveground remains, the commanding officer's quarters, officers' quarters, the hospital sergeant's quarters, the post laundry and the gymnasium, more extensive investigation would be appropriate. However, in any investigation of these sites, every effort should be made to avoid damage to surviving timbers and foundations. After investigation, building perimeters should be defined.

Sites Without Aboveground Evidence. Between 25 and 30 sites exist where there is virtually no aboveground evidence. Here, archaeological investigation that might include total site excavation would be warranted. At a number of these sites, officers' quarters, various double officers' quarters, the second quartermaster's storehouse, the site of an NCO quarters, and the guardhouse, there are specific references to basements. Records of the ARC indicate that basements were filled and leveled for the fort's airstrip, indicating that even this area may produce evidence of former structures. However, investigation of all sites without surface remains is recommended. To the extent possible, using archaeological information and other records, building perimeters should be defined.

Additional Sites. Sites of former fence lines, gravel walks, boardwalks, roads and water lines should be investigated and the locations and routes of such sites should be identified as precisely as possible. In all archaeological investigations, proper methods of excavation and recording should be followed. A qualified archaeologist should be associated with the project and on site to administer investigatory work.

Primary work during the 1976 summer season will be a continuation of stabilization work and the protection of extant structures. It is recommended that archaeological investigations be initiated during the summer of 1976 with completion of such work by the summer of 1977. Present plans anticipate extensive site work, some building restoration and some site identification, as well as detailed interpretive planning by 1978. All of these projects will be affected by archaeology, making the immediate need for site investigation obvious. With additional historical research, archaeology is a high priority item for 1976.

Roderick Sprague's report on Fort Egbert⁴ should guide development of an archaeological program, although several minor modifications are recommended. First, regardless of other work, excavation of the stable is the first priority for 1976 archaeological investigation. There should be no question that such work must begin immediately so stabilization work can be carried out.

Second, based on documentary evidence in ARC records that basements existed for buildings nos. 2, 4, 5 and 28, it is recommended that they receive a higher excavation priority than that assigned by Sprague.

Sprague suggests that the shops, no. 13; civilian employees' quarters, no. 24; and Signal Corps quarters, no. 32, should be left essentially as they are. It is recommended that the enlisted men's barracks, no. 21, be left as is also.

Despite damage to surface evidence of the former location of the firehouse (water wagon shed), no. 44, in grading for the airfield, we would encourage a higher priority for the original site. It appears that the opportunity to remove the firehouse to its original location will occur in the near future and site excavation should precede such work. Consideration is being given to reconstruction of the telegraph office, no. 29, and a higher excavation priority for its site is recommended as well.

Finally, several sites reportedly disturbed during 1975 stabilization work were, in our opinion, disturbed prior to 1975 by development of the airfield and subsequent ARC use of the property as a maintenance and storage area for heavy equipment. In our opinion, disturbance to the sites of the quartermaster's office and storehouse, no. 11; wagon shed, no. 15; NCO quarters, no. 16; and the commissary warehouse, no. 26, all predate 1975 stabilization work.

Sprague's report is a welcome addition by a highly regarded professional archaeologist to a Fort Egbert preservation plan. With the recommended modifications, its implementation is encouraged.

INTERPRETATION

Stabilization, even restoration, of buildings at Fort Egbert or Eagle is not an end in itself. It will primarily be through a thoughtful, well-executed interpretive program that the meaning and value of these historic resources is conveyed to the public. It is because these resources have historical value to the state and the nation that their protection is most justifiable.

⁴ Roderick Sprague, Recommendations for Historical Archaeology at Fort Egbert, Alaska, University of Idaho Anthropological Research Manuscript Series, no. 18 (Moscow, Idaho, 1975).

Interpretive development should be phased to meet both immediate and ultimate requirements. As the preservation development proposal (Chapter 3) suggests, stabilization and restoration work are anticipated to require a period of five years, although phasing requirements may demand a more rapid or a slower pace. It is recommended that the processes of preservation, as well as the historic significance of the fort, be interpreted to the visiting public. Based on accumulated research data, photographs, architectural drawings and the preservation plan itself, an interim interpretive display should be developed during 1976 for installation at Fort Egbert in 1977. Interim interpretation should satisfy two immediate objectives: (1) informing the public as to why the preservation effort is important--the history of Fort Egbert--and (2) explaining what the processes of preservation and restoration involve.

The granary is recommended for use as work and storage space during stabilization and restoration of fort buildings. On an interim basis, it is recommended that one-third of the building (on the east side) be adapted for use as an orientation center, partitioned from work and storage space. This would provide a limited temporary orientation space, approximately 24 by 20 feet, with a 24 by 40 feet space remaining for working use. It is recommended that ultimately the granary be adapted as an interpretive center. Existing buildings at the fire control station should serve as permanent storage and maintenance space. If necessary, these buildings should be modified or expanded to serve this function.

For the present, exhibit space utilization should be split equally between interpreting the significance of Fort Egbert and its decline and interpretation of the research and restoration processes now under way. Depending on more detailed determinations of space utilization, that portion of the granary allocated for interpretation would currently provide between 80 and 110 linear feet of exhibition space.

Because of lack of space, it is recommended that for now interpretive materials be largely graphic, supported with textual and oral information. While artifacts have been located that could be used in interpretive work, it is suggested that these materials be utilized at a later date as part of a more complete interpretive program. While information relating to the history of the fort in the granary exhibit area should provide an overview, specific information could be developed for use at buildings and sites. Exhibits developed for interim interpretation need not be expensive and they should be simple, in keeping with the primitive and remote characteristics of the fort and its surroundings.

As historical, architectural and archaeological information are further developed, long-term interpretive planning and programming should be initiated. While research presently developed suggests the major emphases of an interpretive program, further research will undoubtedly modify and amplify the obvious major thematic relationships of Fort Egbert. The early years of Fort Egbert are clearly the most significant, although its continuing history and evolution should be a part of interpretation.

Initially, Fort Egbert and its Yukon River counterparts to the west were established to provide law and order as well as the services normally provided by civil government. It is recommended, therefore, that the major interpretive themes at Fort Egbert be the military role in establishing law and order and in developing supply, transportation and communications systems in interior Alaska. As Fort Egbert served a major role in establishing the Washington-Alaska Military Cable and Telegraph System in Alaska, the story of communications development is the most significant historical relationship of the fort. Every effort should be made to avoid duplication of interpretive programs, or parts of programs, at Dawson in the Yukon Territory and Skagway, Alaska, where the Canadian and United States governments are developing major interpretive programs relating to the gold rush. The BLM should work closely with the U.S. National Park Service and the Canadian Department of Indian and Northern Affairs interpretive planners to assure that the interpretive developments at the three locations are complementary.

In general, historic buildings should be utilized to interpret specific aspects of fort life to which they are related, with the exception of the granary which, as mentioned, should serve an adaptive use as orientation and interpretive center. The mule barn should provide a setting for emphasis on transportation; the quartermaster's storehouse relates to the mission of the military in assuring the delivery of supplies upon which people in the interior were so dependent; the surviving NCO quarters relate to domestic life at the fort; and the water wagon shed can be used to tell the story of the fort water supply and fire protection system. If it proves to be true that the present Eagle Village community center is the 1905 post bakery, it would then be recommended that the building be returned to Fort Egbert and construction of a new community center for the village be undertaken cooperatively by Eagle Village, BLM and the U.S. Bureau of Indian Affairs. A continuing use is recommended for the old post bakery, reconstructing the baking ovens and making baked goods that would be sold to visitors and the local population.

Since no structures remain relating to the development of the cable and telegraph system within the perimeter of the fort, it is recommended that one building, the former telegraph office, be reconstructed. This building further serves the purpose of defining the southern boundary of the fort, since no buildings survive there. The reconstruction proposal is discussed later in this report. The telegraph office should serve primarily to explain the system, while the granary, as the fort orientation center, should function as the primary visitor contact point. The ruins of the wireless station merit minimal interpretation, as interpretive continuity suggests the telegraph office should be the major site for telling the communications story.

General interpretive signs should be erected at major points of entry to the fort and specific interpretive markers used at sites of buildings and ruins. The form and appearance of such markers will be determined during interpretive planning. However, they should be simple, in keeping with the environmental character of the fort, small and unobtrusive. While it may be advisable to develop guided interpretive tours of the fort at some future date, we would encourage development of a self-guided walking tour brochure in the immediate future.

LAND USE

Many of the existing land uses within the perimeters of Fort Egbert are inappropriate in the context of preservation, stabilization and interpretation of the fort. Incompatible, but necessary activities should be removed from Fort Egbert to locations that will not visually affect the fort complex. To the degree possible, land use and the fort itself should be restored to their historic appearance.

Campground Access. Currently, the primary route from Eagle to the BLM campground near Mission Creek is across the fort in the proximity of significant buildings. Use of these roads for vehicular traffic is a visual intrusion on the fort. Several road locations appear to go directly over former building sites. It is recommended that campground access routes be relocated outside the perimeters of Fort Egbert. Former road systems, associated with the historic appearance of the fort c 1911, should be reestablished and vehicular access to them should be limited to emergency use and for servicing buildings and grounds as required.

Alaska Department of Highways. For many years, surviving buildings at Fort Egbert have been used by the Department of Highways for storage and maintenance of vehicles and equipment. This use was removed from the fort during the summer of 1975 to a temporary location at the intersection of Third and C streets in Eagle, near one of the major access roads to the fort. Even in its present location, the highway department facility is a visual intrusion on the historic character of the fort and the town. Since the present site is considered temporary, it is recommended that it be relocated to a less obtrusive site as early as possible.

In its own right, the grass airfield is a historically significant element in the history of Fort Egbert. It has existed for nearly 50 years and was a critical factor in transportation, communication and supply for the town of Eagle. Any interpretive program at the fort should acknowledge the role of the airplane in the history of the community. However, with the existence of a larger, improved gravel airstrip to the south of town, the Fort Egbert strip is only occasionally used.

The airfield bisects the old military parade ground diagonally and it is located over several historic building sites. While the airfield remains in use, it is not possible to excavate and identify former building sites, nor can the water wagon shed be returned to its original location. While the strip remains in use, it is also not possible to reestablish the appearance of the military parade ground, a critical factor in restoration of the appearance of Fort Egbert.

Given the alternative of a usable airfield to the southeast of town and the importance of reestablishing the fort parade ground, abandonment of the grass airfield is appropriate and necessary to development of Fort Egbert as a historical interpretive complex. Abandonment of it may require that some improvements be made to the gravel airstrip for year-round use, especially for parking and storage of vehicles and aircraft.

The eastern part of the old grass airfield extending beyond the former parade ground should be given a limited landscaping treatment using trees and other plant material to redefine the eastern terminus of the parade ground. The western portion of the airstrip beyond the existing NCO quarters should receive a similar treatment and should be regraded to its pre-airfield appearance establishing a visual terminus to the fort on the west. Building sites within the airfield should be excavated and identified and the water wagon shed should be relocated on its original site.

Parking. While parking for visitors to Eagle and Fort Egbert is not currently a problem, the need for parking for 75 to 100 automobiles and camper vehicles should be anticipated. Parking should be located, landscaped and screened in a place and manner that will not constitute a visual intrusion on the fort or the town, yet it should be sufficiently close to provide easy access to both the fort and the core of the town. Block nine in Eagle is recommended as a well-located site for visitor parking.

Land Survey. As a part of the long-term development of Fort Egbert, a land survey should be conducted. Drawing from historical documentation, existing buildings and ruins and archaeological evidence, the survey should locate and map all fort buildings, roads, walks, fences, utilities, flagpoles, outbuildings, etc., with both current and c. 1911 land contours. Current ownership and property lines for all land within the 1911 Fort Egbert Military Reservation should be identified.

RECORDING BUILDINGS

All buildings and sites with aboveground remains should be properly recorded in their June 1975 (or current) "as found" condition. Recording should follow the standards of the Historic American Buildings Survey (HABS) and, if possible, should be related to a HABS summer survey project. Existing structures that should be recorded are: the mule barn, granary, quartermaster's storehouse, water wagon shed and NCO quarters. The ruins of the post hospital, several remaining heater houses and the Signal Corps barracks should be recorded, as well.

Only the ruins and the mule barn actually exist in the pre-June 1975 as found condition. Prior to stabilization work on the other structures, however, photographs and measurements were taken for the purpose of recording the buildings. As found ground plans have been made of all buildings on which stabilization work was performed. With the exception of the NCO quarters, minimal change has been made to the as found condition of structures above ground.

It is recommended that HABS recording of Fort Egbert structures be undertaken in 1976 or 1977 in conjunction with the historical archaeology program.

STABILIZATION AND RESTORATION MASTER PLAN

In April 1975, on-site inspections of buildings at Fort Egbert, combined with additional field work in May and June of 1975, revealed the extant buildings and the ruins of the post hospital to be in the conditions subsequently described.

Quartermaster's Storehouse (Building No. 12): Built in 1899 of native spruce logs, this structure was the first of two Fort Egbert quartermaster's storehouses. It is a one-story structure, 25 by 81 feet with a log foundation. Exterior walls were built of three-sided logs laid horizontally with vertical posts 16 feet on centers. The log walls were exposed on the interior, which was separated into two rooms. In 1905, general repairs were made to the fort buildings, especially the earlier log structures. It is assumed that in 1905 the log walls of the quartermaster's storehouse were covered on the exterior with 1 by 8-inch drop siding hung on vertical stripping nailed to the log walls. Photographs of c 1907 show the building with drop siding. It is assumed that corner boards, window and door casings were added and exposed purlins boxed in during 1905 renovations. The original roof was corrugated metal, similar to the present roof, although it is not currently known whether the present roof is the original.

The building remains on its original location, although it has had several alterations. A doorway was filled in and a window was added on the south wall, a 2 by 2-foot opening was made in the north wall, storm windows were added, a small office partitioned in the east room and a center post was added in the west room. Clear span trussed rafters, 24 inches on center, support the metal roof.

The quartermaster's storehouse is a simple structure which served a utilitarian function at Fort Egbert, that of storage of the quartermaster's supplies and a six-month supply of emergency rations for the soldiers. Today it serves to define the western perimeter of the Fort Egbert parade ground.

Inspection of this building in April, and more intensively in June 1975, revealed that foundation logs were 100 percent rotten to a point above the ground line and that 80 percent of the floor joists were rotten. The rear two-thirds (west end) of the building had settled severely, causing a pronounced hump along the roof ridge at the location of the transverse interior wall. The east porch was badly deteriorated and required replacement. In general, siding was weathered but in good condition above ground. Window sash was found in fair to poor condition with some broken glass and damaged muntins. Flooring was found to be in generally good condition, as were interior walls, ceilings, doors and window casings.

Stabilization work required raising the building on jacks and excavation of a permanent crawl space within the perimeter of the building to provide proper ventilation. Exterior drop siding was removed to inspect the condition of log walls. Foundation logs to a point above ground were totally deteriorated and required complete replacement. Because of the difficulty in

obtaining rounded logs, replacement foundations required substitution of squared 8 by 10-inch logs. The distinction between original log material and replacement square logs is clearly evident and if it is deemed appropriate, squared logs could be replaced by rounded logs at a future time. Wood foundation members that might be subject to soil-moisture wetting will be treated chemically to arrest decay of wood members. As additional protection, exterior surfaces of new foundation timbers were to be treated with pentachlorophenol, and a visqueen vapor barrier was established to isolate wood members from direct soil contact. While the crawl space beneath the building did not exist originally, it was determined to be a necessary compromise for the long-term preservation of surviving original building elements and the protection of newly introduced members. Below the former foundation line, a new foundation was placed on a post-and-beam system to allow for crawl space.

After the new foundation was built, exterior drop siding was replaced on the building. Some original siding that had been at ground level or below was badly deteriorated and duplicate siding will have to be produced to replace it. All siding that could be salvaged was reused, where possible.

Interior floors were numbered and removed and found to be in salvageable condition. A limited number of planks were beyond reuse and have been replaced. Subflooring and joists were beyond repair. Joists were replaced with new members and original flooring relaid over a plywood subfloor. Insulation was placed between floor joists. The transverse wall was removed during this process and later reinstalled. The south doorway was restored and the north wall opening was closed.

The east porch and steps were deteriorated to the point where they could not be salvaged. The porch was recorded and subsequently removed. During the summer of 1975, concrete footings were poured to provide foundation supports for a new porch framework that duplicated the original. Decking (2 by 12 inches) will be installed in 1976. Total replacement was recommended because of the degree of decay. It did not seem that surface treatments of pentachlorophenol would resolve decay problems, since decay had reached the interior of wood members and surface treatments would not be effective. New members were treated prior to construction, providing eight to ten years of protection. Maintenance schedules recommend retreating at six-year intervals, a procedure that should maintain new members indefinitely. Chimneys were reinstalled and fire protected for use.

Granary (Building No. 17): Built in 1903 as a 200-ton-capacity granary, this building served as a storage facility for the Fort Egbert grain supply. A 1912 map shows this building 80 feet east and 20 feet south of its present location, although a 1925 Alaska Road Commission map, copied from a 1909 military map, indicates the building on its present location. Further research is required to determine if the building was moved. Several photographs appear to show the building at its present location. However, its present creosoted post-and-beam foundation with a crawl space within the perimeter of the building indicates that the foundation has, at some undetermined point, been replaced. The plan does not currently recommend moving the building.

The granary is a one-story building, 24 by 60 feet, of mill construction with 4 by 6-inch perimeter wall posts and a centered, longitudinal row of 6 by 6-inch posts running from east to west. The gable roof is supported by wood rafters and is covered with corrugated iron over wood sheathing. Siding is board and batten fastened to horizontal girts set between perimeter posts.

Foundations are 7 by 2½-inch creosoted timbers with the upper surfaces at grade. These are at the perimeter of the building and along three equally spaced east-to-west longitudinal rows. Creosoted posts (4 by 6 inches) support 6 by 8-inch beams carrying 2 by 7½-inch joists. All were found in good condition except where earth pressure along the north and west walls has pushed the posts out of plumb.

Exterior siding consisted of vertical board and batten--¾ by 8-inch board with ¾ by 3-inch batten, which was weathered but sound above ground and deteriorated below ground, most severely along the north and west walls. Four-over-four-light double-hung sash were found in fair condition with some cracked glass. Doors and window casings were found in generally sound, but weathered, condition.

Floors were 1 by 6-inch laid over 2 by 8-inch plank subflooring and were in good, although oil-stained condition. The building had neither interior walls nor ceilings.

There is evidence of two former windows on the north facade, corresponding to existing windows on the south facade, and a window on the west facade, all of which have been closed. Consisting of one room, the building had doors and porches on the east and south. All porches are severely deteriorated and require rebuilding. Extreme pressure of earth against the north and west walls during freeze-thaw cycles is clearly causing deterioration on these walls and some failure of supporting posts along the north and west perimeters.

Treatment undertaken on this structure during 1975 was far less extensive than on other buildings, since the foundation of the granary was in far better condition than most structures. However, it was necessary to remove lower board and batten siding on the west end, and it was temporarily replaced by a horizontal trim board. The skirt board on the perimeter of the building was removed because of severe deterioration and temporarily replaced by a skirtboard. A decision must be made whether to replace entirely the board and batten of the west wall or whether to piece in new board and batten to replace deteriorated elements. Since it is the intention to retain all original material possible, it would be preferable to retain the original and splice in new material, although it will be far more difficult, expensive and time consuming. While it is weathered, most of the west wall is salvageable. It is recommended that the original material be retained and new wood be spliced in as required.

Foundations on both the north, south and west were realigned to their original positions, having been pushed out of alignment by earth pressure. The perimeter of the building was trenched, a drainage system established and

a concrete retaining wall poured to the north and west of foundations to prevent further earth pressure along the north and west walls. Rotted beams which had had direct soil contact were removed and replaced by new members.

Porches and steps at the east and south were found to be too deteriorated for continued use. These were recorded and replaced by new porches. Concrete piers were poured for both porches and the two porches were rebuilt to original configurations. The perimeter of the building was backfilled and grade work completed for a drainage system.

During future construction work, the granary will serve as a workspace and storage area as well as an orientation center.

NCO Quarters (Building No. 19): Built in 1900 as a two-room 16 by 36-foot rectangular noncommissioned officers' quarters, this building went through several alterations during the next seven years. Of the four NCO quarters and six structures for housing officers, this is the only building surviving at its original location, although the museum of the Eagle Historical Society is located in a former NCO quarters moved to Eagle between 1915 and 1918 for use as a customs house.

In 1902, the structure was enlarged from a one-story, two-room residence to a two-story, five-room living space. In investigating the structure in June 1975, we found that the original foundation of the 16 by 36-foot building was left in place at the time of alteration. The northern 23 feet of the house were razed and replaced with a two-story unit that extended 9 feet 6 inches further east; the second story was capped with an east-west oriented gambrel roof with north and south dormer windows. A corrugated metal roof over the building's original wood shingles was added. Gambrel ends and dormers are shingled, the east end in a wave pattern. The south wing, the lone surviving part of the original structure, is one story, 14 by 16 feet, with a hipped roof covered with a corrugated metal roof over wood shingles. All first-floor wall surfaces are covered with drop siding throughout the building. In 1907, a 15 by 13-foot one-story shed roof addition was placed on the west end of the two-story structure. It is of frame with horizontal drop siding and roofed with a corrugated steel sheet.

The building was used at some point to house crews of the Alaska Highway Department and at that time some interior elements were removed, as was second-floor and some first-floor wallpaper. Original wallpaper appears in the stair hall and front parlor, with traces of wallpaper elsewhere.

Investigation of building conditions indicated that exterior siding was in generally good condition and the metal roof, while rusted, was not leaking. The foundation was so severely rotted that in many locations it was not possible to determine the dimensions of the original foundation members. In many areas, no foundations remained at all and walls were supported by drop siding and diagonal sheathing. Extreme deterioration had occurred in stud ends, sheathing, siding, sills, floor joists and some subflooring due to direct soil contact.

The NCO quarters were raised and a crawl space reestablished. In the process a small partial cellar was lost when its plank walls collapsed. The cellar was not original, however, but, if necessary, it would be possible to excavate it for future use. After the building was raised and the crawl space established, rotted foundations, sills, beams and joists were replaced. The 8 by 8-inch foundation timbers were treated chemically and a visqueen vapor barrier was installed.

Subflooring was found in poor condition and most could not be salvaged. New subflooring was installed from the underside, allowing preservation of the finished floor. The west wing was systematically taken down to raise the building and excavate a crawl space and will be rebuilt subsequent to completion of stabilization work on the main house. This wing will be rebuilt in 1976.

The metal roof was removed and original shingles found to be deteriorated were also removed. New fire-resistant pressure-treated shingles were installed in their place. Prior to completion of reshingling, the supply of shingles was exhausted. In those areas least exposed to weather, some original shingles were retained and additional exposed roof areas received a temporary tarpaper roof for the 1975-76 winter season. Roofing will be completed in 1976.

Generally, interior elements were found to be in salvageable condition. Interior wall surfaces consisted of random width rough-sawn boards, covered with muslin and wallpaper. Ceilings consisted of 1 by 4-inch boards and were found in good condition. Stairs and the balustrade to the second floor were in generally good condition. A number of balusters have been removed and appear to have been salvaged for use in the Episcopal parsonage in Eagle. A number of exterior wall surfaces retain original yellow ochre paint. Roof shingles retained original mineral red paint.

Following the 1975 summer work, the building was closed for the winter season; stabilization will be completed in 1976.

Water Wagon Shed (Building No. 44): While the precise construction date of the water wagon shed is not yet determined, photographs give some indication that the main structure was built in 1907 and the south shed added in 1909. However, this is contradicted by National Archives documents relating to the construction of the building which clearly suggest it was built at one time and was completed in October 1909. Designed to house the Fort Egbert fire-fighting equipment and water wagons, the interior space of this building is impressive. In more recent years, it has been used by the Alaska Highway Department to house its road equipment. At some point, the building was moved from its original location north of the quartermaster's storehouse to its present position west of that building. The one-story frame structure sits on a heavy timber foundation and has a tarpapered gable roof. Walls are of diagonal boards covered on the exterior and interior with built-up asphalt and asbestos roll siding painted yellow ochre. Vertical and horizontal wooden battens hold the wall covering in place. The 15 by 36-foot south wing is a one-story shed on a timber foundation and has a corrugated steel roof over an earlier tarpaper roof. Exterior

wall treatment repeats that of the main structure. At the east and west ends of the main structure are large (12-foot wide by 15-foot high) centered sliding doors allowing vehicles to drive through the building. Doors are a double layer of diagonal boards and are in fair condition. A swinging double door is located at the east end of the one-story shed.

As with other Fort Egbert buildings, structural material above ground is in generally good condition, although some areas of asbestos siding are in poor condition. Windows and trim are in salvageable condition, as are sliding doors, although all require some repair.

Interior flooring was generally sound. A 12-foot central section has had the floor removed and is now of earth. The east and south walls of the shed are 1 by 6-inch shiplap and the west interior wall is 1 by 4-inch shiplap all in good condition. Ceiling boards (1 by 4 inches) in both units appear in good condition.

When this building was moved, it was sited on a slight north-south grade. Those structural elements below ground on the north were found to be badly deteriorated while those proceeding south, where there was less direct soil contact, were found in progressively better condition.

Primary stabilization work on the water wagon shed consisted of leveling the building and hand excavating a crawl space under the south half of the structure. While it is hoped that the water wagon shed eventually can be removed to its original location, work on a permanent foundation was begun and concrete footings were poured at the present location. While some foundation elements were salvageable on this structure, it required almost total construction of a new foundation. Only the south section of a new foundation was installed in 1975. Because the possibility exists of moving the building to its original location in 1977, no additional foundation work will be done on this structure in 1976. Completion will be effected in conjunction with returning the building to its original location.

While use of concrete footings departs from the original foundation appearance and material, it is an experiment intended to determine whether, for long-term building preservation, the use of such systems might prolong building life in a subarctic climatic condition and therefore might constitute an acceptable long-term solution to preservation in such environments.

Mule Barn (Building No. 14): Built in 1900, the two-story mule barn is the largest and most impressive of the surviving Fort Egbert structures. Originally, the ground floor had stalls for 56 animals. Mules and horses were critical at Fort Egbert in the construction of the Washington-Alaska Military Cable and Telegraph System lines and for overland freighting during winter months. The mule barn was a vital part of the fort complex and relates to the transportation and communications development of the Alaskan interior.

The building is a two-story frame structure, 30 by 150 feet, on a timber foundation. The first floor had stalls for animals, a sick bay and a duty

quarters. The second floor is an open loft for feed storage with feed chutes to each stall. The gable roof is carried by clear-span trussed rafters and covered with board sheathing and a corrugated metal roof. Exterior stud walls were covered with 1 by 8-inch drop siding over diagonal boards. Stud spaces on the first floor are filled with sawdust and wood chip insulation. A series of dog kennels is located along the south wall on the exterior of the barn. The barn was not originally painted but appears to have been painted in 1905 as a part of general fort improvements. The south exterior wall, however, was not painted below the shed roof line of the dog kennels. Faint remains of exterior paint are visible in protected areas.

In more recent times, the mule barn has been used by the Alaska Highway Department for vehicle storage. The department removed most of the stall partitions and some posts separating the stalls. The posts, which also serve the structural function of supporting the second floor, have been replaced with temporary bracing. In addition, removal of stall partitions along the north wall contributed to caving of the north wall from earth pressure.

Above ground, the barn appears essentially sound and free of decay. Below ground, problems are severe. The building is set on timber foundations around its perimeter and includes two equally spaced east-west longitudinal foundations. Perimeter foundations indicated severe deterioration, especially along the north wall and portions of the east and west walls where wooden elements were in direct soil contact, although interior timber foundations were in fair condition. Settlement on the perimeter, combined with earth pressure along the north wall, has caused extensive displacement of the north wall. In general, foundation timbers, first-floor beams, some joists and lower ends of diagonal wall sheathing and siding will require replacement. Along the north wall, where soil has been compacted above previous grade levels, severe deterioration extends into the drop siding for several courses. Estimates are that siding and possible internal wall decay may extend as much as 12 to 18 inches above ground.

Because of the lack of crawl space in the north bay, joists and some flooring have deteriorated badly. Earth pressure and soil contact have caused deterioration of lower horizontal drop siding to the point where some areas along the north wall are completely open to interior exposure. This has allowed additional moisture to enter the building and contribute to deterioration, especially during times of spring thaw. Aboveground walls, posts, beams, joists and roof trusses appeared in good condition. The loft floor indicates localized areas of decay due to roof leakage, but damage is not extensive.

Dog sheds along the south wall are nearly 100 percent deteriorated. Shed roofs on all kennels are missing and direct soil contact at the grade line has caused serious general decay. Investigations of these structures indicated that they could not be retained, in whole or in part because of the extent of decay.

Weathered, exterior siding appeared in generally sound condition, although some checking and cupping has occurred. Animal stall windows were

double glazed in 14 by 14-inch openings. Interior sash are guillotine type, while the exterior are casement. Many of the sash are missing and those remaining are in poor condition. Other windows are four lights over four double-hung sash and are generally in poor condition with some glass missing.

Because of the extensive nature of work required on the mule barn, no stabilization was undertaken during 1975. Field investigations were accomplished and drawings and specifications for 1976 structural work will be prepared during the 1975-76 winter. Stabilization of the mule barn will be a major part of 1976 field work.

Post Hospital (Building No. 34): Built in 1906, this was the second post hospital, replacing an earlier structure located near the enlisted men's barracks. After construction of the second hospital, the original was converted to use as the post laundry. The hospital had 19 beds and was built on a cross plan to the north of the majority of post buildings.

The hospital was built of sawn logs and covered with exterior drop siding. After abandonment of the fort, much of the material was salvaged, although portions of three walls remain today. Above grade, these are in relatively sound condition. No major effort was made in 1975 to stabilize ruins, other than to construct bracing to arrest further displacement of extant walls. Additional stabilization will take place in the future.

Based on work accomplished in 1975, total required stabilization of all extant structures, including the post hospital, will require three additional summers, extending through 1978.

The NCO quarters, quartermaster's storehouse, granary and water wagon shed have all had remedial work done on their foundations including installation of drainage systems. The NCO quarters and part of the water wagon shed have had their foundations treated chemically, although other structures have not. Completion of stabilization on these four structures will include the following, as applicable:

1. Repair or replace exterior siding as required on all structures. Original siding will be retained to the greatest degree possible. Some replacement material will be required and will need to be custom milled.
2. Reproduce skirt boards and grade level ends of corner boards for all buildings.
3. Repair window casings and repair or replace muntins and sash.
4. Reglaze all windows, using extant glass, if available.
5. Repair doors, where possible, and reproduce and replace when necessary.
6. Reroof the stable and water wagon shed. Where alterations have occurred, replacement will duplicate the original material (i.e., NCO quarters roof replaced with wood shingles rather than 1975 metal roof).

7. Repair porches where possible (NCO quarters) and replace where required (granary and quartermaster's storehouse).

8. Treat all wood surfaces exposed to potential sources of biological deterioration. Newly introduced members will be treated prior to placement. Foundation members in contact with earth will uniformly be treated chemically. Subfloor members clear of earth will be treated with pentachlorophenol.

Major emphasis in stabilization work will be on the stable. Work on stabilization of the post hospital will be undertaken in 1978.

The mule barn will require complete foundation replacement, requiring raising the building on jacks, excavation of a permanent crawl space, building a new foundation and installation of a proper soil cover to prevent future deterioration. Provisions will also have to be made for proper drainage to eliminate water accumulation around the foundation.

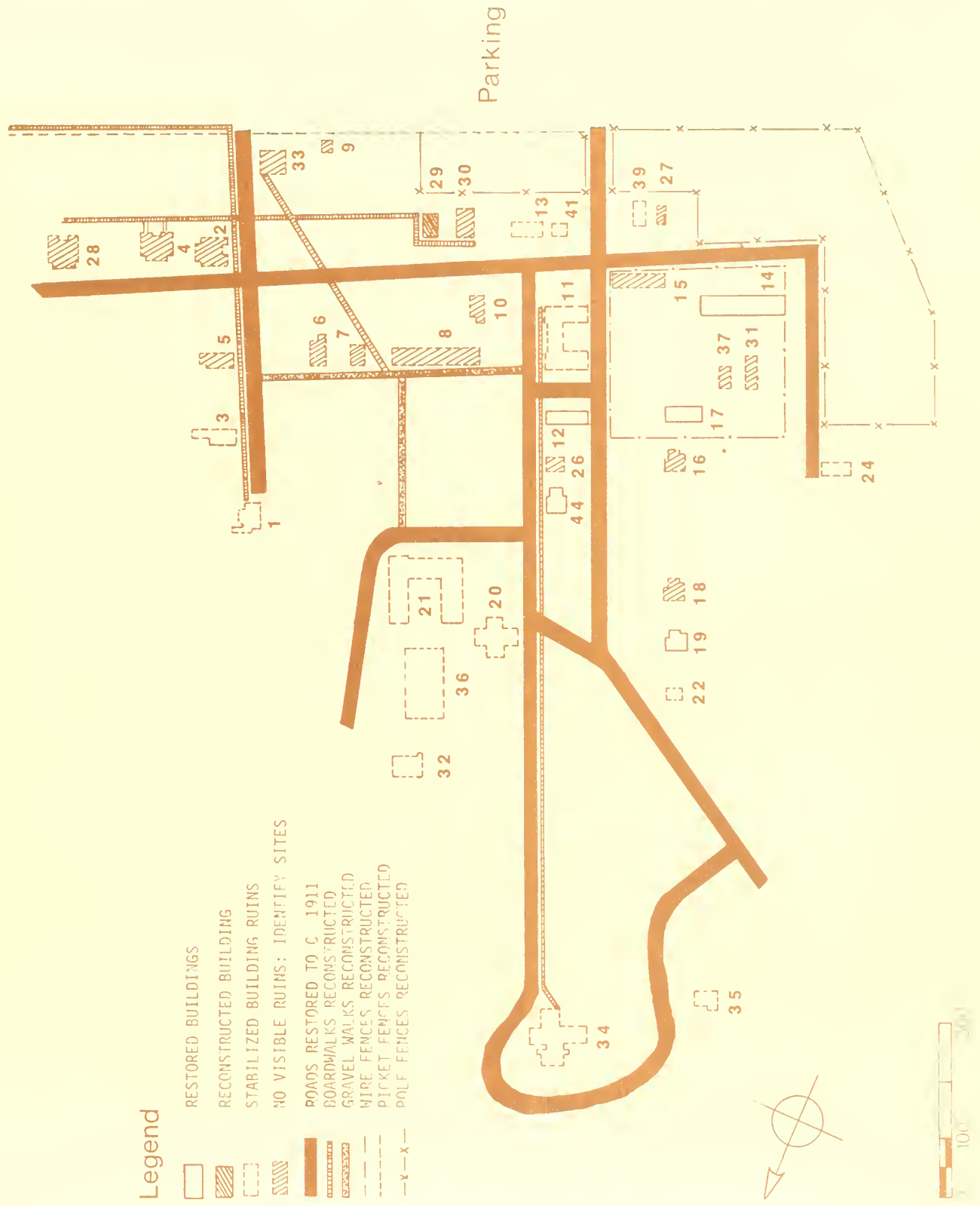
As with other structures, all openings, windows and doors will be repaired or replaced, reglazed and reinstalled. A new roof, duplicating the present corrugated steel roof, will be installed.

The post hospital will be recorded in as found condition and surviving elements will be stabilized. While below-ground wood elements of surviving hospital walls have not been investigated, conditions can be assumed to approximate other fort structures. In all likelihood, if these walls are to be stabilized and retained on a long-term basis, below-ground wood foundations will require replacement. After thorough recording, the careful removal of the walls, the pouring of a concrete foundation beam below the grade line is recommended. Square-sawed log walls should be treated with a surface application of pentachlorophenol and replaced on the concrete beam. To maintain the walls in an upright condition, they must be braced, either with pressure-treated timbers on a diagonal or with vertical metal posts. The remaining hospital ruins probably cannot be stabilized and retained for an indefinite time period.

As part of the long-term restoration program, stabilization work will also be accomplished on certain sites with extant ruins at ground level or above. These sites include the enlisted men's barracks, Signal Corps barracks, civilian employees' barracks and the wireless transmission site to the southwest of the fort. Stabilization work on these sites is anticipated to commence during 1980 and it is estimated that this work can be accomplished in one summer. (See Exhibit 5.)

While in all likelihood these ruins cannot be retained in perpetuity, decay can be arrested to some degree, prolonging their disintegration. Surface chemical treatments at regular intervals is the limit of stabilization anticipated for most ruins. However, it would be possible to place new wood or concrete footings beneath the floor of the Signal Corps barracks, if desirable. Such treatment would provide an additional means of slowing deterioration. While it is an available option, such an approach should be taken only if funding is adequate subsequent to higher priority projects.

Fort Egbert: Proposed Treatment



DEVELOPMENT PLAN

The preservation process at Fort Egbert should not conclude with primary stabilization of the five extant buildings. While it is recognized that it has been the policy of the Bureau of Land Management to limit its cultural resource responsibilities to stabilization and arrest of further deterioration, it is also recognized that there are exceptions where such policies should be modified. In view of the historical significance of both Fort Egbert and Eagle to the history of Alaska, and the nation, the importance of these resources mitigates in favor of a more extensive program.

However, intensive promotion of tourism to this site is not recommended. Neither Fort Egbert nor Eagle is able to cope with large numbers of outside visitors, certainly not the number that will be attracted to Dawson or Skagway. The community has minimal tourist facilities: one roadhouse capable of accommodating 12 to 15 persons and limited camping sites at the BLM campground. Even with the introduction of additional facilities, the community would not be able to accommodate more than 100 to 125 visitors per day. We have been advised that the present campground facility is already overused and that there is a need to establish a second facility to provide for rotational use of the campgrounds. We also believe that the introduction of many new facilities to house and feed tourists could have detrimental effects on the physical character of Eagle and the lifestyles of the people who live there. All preservation plans for the fort and the town should recognize the special character of Eagle. It is a living community; it is not a "tourist town." Every effort should be made to retain the special and significant character of the community and its surroundings.

It is difficult to project accurately the kind of tourist volume Eagle and Fort Egbert might anticipate in the future. However, based on conservative estimates, tourism will exceed the available service capacity presently existing in the community. It is not unreasonable to assume that within the next decade, one or more roadhouse or motel could be established in Eagle on a feasible basis. The BLM and other federal and state agencies should be prepared to assume some responsibility in assisting Eagle in determining how to deal with the potential impact of new tourist facilities. Second, BLM should assess the adequacy of existing campground facilities within one or two hours driving time from Eagle. Planning for additional facilities, if needed, should begin soon.

Expanded visitor facilities and services at Dawson and Skagway, plus opening of the Carcross Highway, between Skagway and the Alaska Highway, will directly affect Eagle. For visitors entering Alaska with Dawson as a destination, Eagle can easily be added to their itineraries. If increased tourism occurs prior to proper planning by both the town of Eagle and the BLM, the results could be destructive to a unique historical environment.

Chapter 3 of this report recommends steps that might be taken in Eagle to prepare for expanded tourism. This plan, however, can only recommend; implementation is up to Eagle.

While it is necessary to plan for the impact of tourism, it is also important to plan for the experience the visitor receives. Those who do visit should receive the best possible interpretive experience. Restoration of buildings and grounds at Fort Egbert and Eagle is critical to a visitor's perception of the significance of this resource. Because of development activities subsequent to abandonment of the fort, it is not possible currently to visualize the appearance of Fort Egbert at the height of its development. Imaginative treatment of the fort grounds would enable visitors to grasp the sense of a military post and its relationship to the town.

Site Work

Fort grounds should be restored insofar as possible to their 1911 appearance. A substantial part of this work will include clearing trees and brush around and between buildings and building sites. Views and vistas that existed in 1911 should be reestablished based on photographic records, continuing initial efforts begun in 1975. Site restoration should include the following work:

1. Realign roads to their 1911 positions within the fort and grading and landscaping existing roads that postdate the fort's period of major significance.

2. Reconstruct former gravel walks and boardwalks at their original locations, after completion of archaeological and land survey work.

3. Redefine the original perimeters of the parade ground.

4. Reconstruct fences as they appeared in 1911. Good photographic evidence exists indicating the appearance and location of several types of fencing found at the fort, including picket, pole, rail and wire.

5. Replace the flagpole. It is not yet determined where the proper location for the flagpole will be. It appears on fort maps of 1901, 1906 and 1909 approximately 100 feet west of building no. 3. It is evident at this site in several early photographs, as well. However, at one point, the flagpole was also situated near the guardhouse (building no. 33). During most of the fort's history, the flagpole appears to have been located on the parade ground near building no. 3, a traditional place for the flagpole at military posts. Photographs may assist in determining the dimensions of the pole for reconstruction. Archaeological investigation may reveal the precise location of the flagpole on the parade ground, as it has done at the guardhouse site.

6. Repair and regularly maintain the cemetery grounds, fences and headstones. When possible, all grave sites should be identified.

7. Reestablish the appearance of the target range and identify the area with an interpretive marker.

8. Redefine the 1911 fort water supply system. The line, running from

Mission Creek to the fort, is still clearly recognizable in most areas. Partial remains of heater houses, boiler, storage and overflow tanks are evident as is the wooden casing for the water line.

a. Stabilize the overflow tank and boiler at Mission Creek. Proper guards must be erected around the overflow tank, as it is currently a safety hazard and is too accessible. Stabilize the remains of the wooden water line casing the entire length of the line and clear the line of debris to establish a 20-foot wide path.

b. Stabilize ruins of heater houses between the BLM campground and the fort.

c. Restore the exterior appearance of the two remaining heater houses at the BLM campground. One of the two, as a demonstration, should include all heater house equipment--stove, water pipe, etc.

d. Identify and mark the sites of the old pump house (building no. 45), pump house (building no. 38) and tank house (building no. 40).

9. Close grass airfield and make provision for a new access-egress road to the BLM campground. Landscape the airstrip to establish the parade ground as the visually dominant open space within the fort.

Initiation of site work in 1978 is recommended and we believe it can be accomplished in one summer. If Youth Conservation Corps, and possibly some BLM staff, could be used for certain clearance and restoration work, some direct costs for labor might be reduced.

Utilities

For long-term preservation, protection and maintenance of buildings and equipment for visitor and residential use, we recommend that utilities systems be introduced at Fort Egbert. A well with an electric pump should be installed along with well-located fire hydrants and a connecting pipe system. The hydrants should be screened or designed so as not to intrude on the historic character of the buildings and grounds. During the summer months, the system can be used as a primary source for fire protection. Pumper trucks and other equipment should be located in the water wagon shed. The well should also serve to supply water for domestic use.

Fire alarms and detection systems should be located in each of the five extant buildings. Pressurized, self-contained gas or dry chemical extinguishers should be located at primary sources of fire danger.

A nine-kilowatt generator should be installed to operate the water pump, lighting and fire alarm system and for domestic use.

A proper fire protection system should receive high priority. During 1976 stabilization work and archaeological investigation, the rubber tank

system used in 1975 should be continued in use. Gas or dry chemical extinguishers should be placed in all buildings during the fall, spring and winter months, and all potential fire hazards should be removed from all historic buildings. By 1977, installation of an all-season fire protection system is recommended, as specified by the supervising architect for permanent protection.

Restoration Program

Primary attention through 1978 should be on additional research, planning and building stabilization. By 1978, the fort grounds should be restored to their original appearance. Building restoration and preparation of structures for permanent public display should be undertaken in 1979 with completion planned for 1980.

1. The exterior of the granary should be restored completely. The interior, however, should be adaptively reused to serve the needs of a small visitor orientation center. For the protection of collections, the building should be insulated and a year-round heating system introduced. The requirements to restore this structure, subsequent to stabilization, will be minimal. The major cost will be interior preparation for exhibit use.

2. The interior of the quartermaster storehouse should be restored to its 1911 appearance and utilized as a museum structure. The building should be furnished as a functioning quartermaster storehouse of the period. This work should be accomplished in 1979. If the BLM considers use of this building as an Eagle community center appropriate, we recommend that such use clearly be temporary. The building should ultimately be an integral part of a historical museum complex.

3. The water wagon shed should be relocated to its original site and the main unit restored as the firehouse and water wagon shed of 1911. The south shed should be adaptively reused to house contemporary fire fighting equipment, combined, if possible, with an Eagle fire protection system for the mutual benefit of fort and town. This work should be accomplished during 1979.

4. The mule barn should be restored to its 1911 appearance and the south facade dog sheds reconstructed. Front rooms in the barn should be furnished as a veterinary sick bay and duty officers' station. Stalls and exterior grazing yards should be furnished to reflect their original uses. This work should be undertaken in 1979.

5. Restoration of the NCO quarters is the most complex and time consuming of Fort Egbert restoration projects. The building should be partially restored and partially adapted for use as a caretaker's residence. The front parlor, stair hall and one bedroom should be restored with period furniture appropriate to a remote military post. Walls should be papered duplicating the original appearance in all rooms. One bedroom should be adaptively used as an exhibit space interpreting, through documents, letters, photographs and artifacts, the domestic life of the fort during its early years.

The south and west wings and the rear room of the main unit of the house should be adapted for use as a caretaker's residence. This space would provide for an apartment of between 650 and 700 square feet. The caretaker's residence should include full utilities--heat, water, sewer and electrical service. To protect the collections, heat should be maintained during the winter months in the museum rooms as well as in the residential portion. The structure should be fully insulated.

It is recommended that restoration of the NCO quarters be undertaken in 1980.

6. If it is proven that the present Eagle Village Community Center is the second post bakery (1905), the structure should be acquired and moved back to its original location. The Bureau of Land Management and the Bureau of Indian Affairs should work cooperatively to provide the village with a good contemporary community center as a replacement. If the bakery is restored, it is recommended that the building be put to a functional use, making baked goods for sale to townspeople and to visitors. If the community center proves not to be the old bakery, the bakery site should be cleared of debris, stabilized and identified with an interpretive marker.

It is recommended that the bakery project be undertaken in 1980.

One suggestion has been that endangered buildings within the town of Eagle be moved to a location at Fort Egbert for their preservation. We cannot concur with such suggestions. The buildings in Eagle are either commercial or residential in nature and differ, with rare exception, in style and function from fort buildings. Moved to the fort, Eagle buildings will be out of an appropriate context and will diminish the integrity of the fort site. It is hoped that programs can be developed within Eagle that will foster the preservation of historic buildings on their original sites or moved to sites duplicating original site conditions and surroundings as closely as possible.

Stabilization of Ruins

Subsequent to archaeological work, existing ruins within the Fort Egbert perimeters should be stabilized to the extent possible. The use of such devices as protective structures over ruins or sites is not recommended, as they would adversely affect the character of the fort complex. With the possible exceptions of the post hospital, Signal Corps barracks and the wireless transmission site, most ruins could only be stabilized for a limited, although undetermined, period of time. Because these ruins are of wood and are in direct contact with the soil, deterioration will continue. Applications of pentachlorophenol to above-grade remains possibly would slow the deterioration process, but eventually these structural evidences will completely disappear. All remains should be photographed and ground plans drawn indicating their locations and configurations.

To the extent possible, visitors should be restricted from direct physical contact with ruins. Walking on them or touching them could speed the

process of erosion with the most fragile members. Possibly, limited and unobtrusive barriers could be used around those sites with substantial remains to discourage direct contact with the most fragile elements.

Certain sites, particularly the post hospital and the Signal Corps barracks, present genuinely hazardous conditions to the visiting public. Visitor access to these sites must be carefully controlled and, where possible, hazardous conditions should be eliminated or substantially reduced.

The hospital, Signal Corps barracks and wireless site have the most extensive remains. As recommended earlier, the hospital walls should be stabilized and their below-ground members replaced. It may also be possible to lengthen the life of ruins of the Signal Corps barracks with limited repair or replacement of its post and beam system supporting the existing floor and pentachlorophenol treatment of the floor and surviving joists. In the case of the wireless station, most of the surviving elements are large concrete, brick or metal objects and the process of deterioration will be much slower. At this latter site, primary work should be clearing brush and debris in and around sites and treating surfaces chemically to retard further decay.

With other sites having limited structural remains, we do not believe they can be salvaged. Sites such as the commanding officer's quarters, gymnasium, enlisted men's barracks, civilian employees' barracks and others should be recorded, their perimeters should be identified and limited barriers erected to discourage direct contact with the sites. We recommend undertaking this work during the period 1978-80 on a phased basis, placing first emphasis on sites such as the hospital and the Signal Corps barracks where it may be possible to arrest further deterioration.

Identification of Razed Buildings

Approximately 30 additional Fort Egbert structures have been completely razed and there is no surface evidence of their existence. Following archaeological investigation, installation of a single pressure-treated log set at grade around the perimeter of each building is recommended, defining its dimensions as precisely as possible. Each site should be identified with an interpretive marker, possibly including photographs showing the building's original appearance. It is recommended that this site identification work be undertaken in 1980.

Reconstruction

Normally, reconstruction of a razed building would not be recommended. However, such an approach is justified under certain conditions.

The development of communications on the Alaskan frontier is perhaps the most significant theme of the fort. No buildings survive within the fort complex relating to this significant aspect of its history, although the ruins of the wireless station are within easy driving distance.

Because of the significance of the Washington-Alaska Military Cable and Telegraph System and the role Fort Egbert played in its development, reconstruction of the fort telegraph office is recommended. Both plans and photographs of the building exist and its site is known.

It is our opinion that the telegraph office can be reconstructed accurately and without conjecture, with the possible exception of the north interior. The reconstructed building would be used to interpret the construction and operation of the telegraph system and the role Fort Egbert had to play in the process.

In an interpretive program, the telegraph office should clearly be identified as a reconstructed building. It is recommended that reconstruction of this building be initiated in 1980.

Furnishings and Equipment

In terms of furnishing and equipping buildings for public display, several of the buildings already have the basis for developing collections. The mule barn has some tack, saddles, harness and other equipment. This will need to be supplemented with additional material appropriate to the era of the fort. The sick bay and duty officers' station will similarly need to be properly furnished and equipped.

During stabilization of the quartermaster's storehouse, items that were stored in the building were discovered. As a part of restoration, based on documentation, shelves and bins will have to be constructed. Currently available items discovered during the 1975 work, such as soap, needle kits and sewing thread, tobacco and other supplies, will have to be supplemented with additional materials. It would be possible to reproduce certain items from existing materials, if desirable. Inventories of the quartermaster and requests for supplies should be reviewed in preparation for supplying this building.

Furniture and accessories appropriate to the era of the fort will need to be accumulated for restoration and furnishing of the NCO parlor, stair hall and bedroom. Items duplicating the originals should be obtained when possible. Furniture, which should not be historic, must be acquired for the caretaker's residence.

For the water wagon shed, it is hoped that a military water wagon of the turn-of-the-century can be located. If not, it might be desirable to reconstruct such a vehicle. Fire-fighting equipment of the fort era should be obtained for display in the main unit of the water wagon shed.

The telegraph office, if reconstructed, should be furnished with telegraphic and office equipment of the period and interpretive materials relating to the Washington-Alaska Military Cable and Telegraph System. There are interior photographs of this building that should prove helpful in developing a furnishing plan.

The bakery will require ovens and other equipment that would have been used in a turn-of-the-century military bakery.

In furnishing all of these structures, photographs, quartermaster inventories and supply requisitions and letters should be reviewed to assure accuracy in developing a furnishing plan and in acquiring materials. Where information relating directly to Fort Egbert is inadequate, we recommend consultation of records relating to other army posts on the Yukon River.

The interior of the granary will be adaptively reused as an interpretive center and maintenance area. Furnishing and equipping this building will depend upon the maintenance needs and interpretive plan for the fort.

It is recommended that a furnishing plan for the fort structures be developed upon completion of a final interpretive plan. Acquisition of furnishings and equipment should begin in 1978 and 1979 for installation in 1980 and 1981 upon completion of building restoration.

Interpretation

As buildings and ruins are restored or stabilized, as sites are identified and grounds restored to their 1911 appearance, interpretive signs should be placed indicating the role of each structure in the development of and daily life at the fort. Where possible, especially with ruins or lost buildings, we would encourage the use of photographic interpretation to indicate original appearance. There is an extensive body of photographic material that could be used for such purposes.

Larger, more comprehensive interpretive signs should be developed for use at major points of entry to the fort. These should provide visitors with an overview of Fort Egbert's significance and, where possible, might include photographic views taken from the same vantage point.

As a part of the interpretive center, development of a scale model of Fort Egbert as it appeared in 1911 is recommended. Such a model would be an excellent device for assisting visitors in visualizing the size of the fort and the interrelationships between elements of the fort and, perhaps, the town of Eagle. Based on available photographs, documents, manuscripts, artifacts and other interpretive materials, the center should convey to the visitor the role of Fort Egbert in the development of the Alaskan interior and an appreciation for the problems of transportation, communication, supply and domestic living in a remote and often alien physical environment. It is recommended that interpretive development be programmed so that the interpretive center would be fully operative by the summer of 1981.

Fort Egbert development phases can be planned so that they require limited expenditures of funds on an annual basis. Once stabilization, research and interpretive planning are completed, we believe site development has a significant priority. As the appearance of a military complex, with its parade ground and perimeter buildings (or, in this case sites) is reestablished, the visitor's ability to perceive and understand Fort Egbert is increased. Subsequently,

buildings restoration, site stabilization and interpretive development can proceed.

It would be possible to accelerate or slow the development process. In part the decision to phase project work as indicated in the plan was designed to avoid injecting too large an economic impact on the town of Eagle, an impact that will essentially disappear after completion of project work. For most of the work required, it will not be necessary to hire outside labor and we believe there is a distinct advantage in obtaining the major labor force from Eagle and Eagle Village. Some labor--skilled carpenters, exhibit designers, a foundry for signs, etc.-- will necessarily be from outside the community. However, we believe that even \$75,000 to \$100,000 in labor requirements in several summer seasons will have a profound impact on the local economy, especially when such funds are no longer a factor after 1981. Yet, it is also conceivable that after full development of the fort, there will be some new employment opportunities for Eagle residents as guides and staff (e.g., bakery) and for maintenance and custodial work.

Operations and Maintenance

The Bureau of Land Management has responsibility for extensive land areas within the state of Alaska. While Fort Egbert may be one of BLM's most significant historical resources, it is one among many scattered in remote areas across Alaska. The BLM commitment to Eagle is a significant departure from the agency's past cultural resource policies. It is a laudable one.

Clearly, the BLM is in the cultural, as well as the natural, resource management business. The experience of stabilization, restoration, public interpretation and long-term management of Fort Egbert offers the BLM an opportunity to expand its own expertise in this field. The experience gained will prove valuable with other resources. Recognizing that the agency is involved in cultural resource management and that Fort Egbert can serve as a management training facility for BLM staff, we recommend that primary responsibility for management of Fort Egbert remain with BLM. As required, BLM should continue to maintain a close working relationship with the National Park Service, the Alaska Division of Parks and private organizations, such as the Alaska Historical Society and the National Trust for Historic Preservation, in further developing its programs.

To undertake restoration, interpretation and management of Fort Egbert, BLM, from time to time, will have to call on the outside assistance of architects, restoration craftspeople, preservation planners, interpretive planners and conservation specialists. The National Trust might assist in procuring required professional services and, in cooperation with other agencies, review and evaluate restoration work. The National Trust might also be able to work with the citizens of Eagle and the BLM to resolve problems that affect both.

We would suggest that BLM staff involved in cultural resource management attend specialized training seminars conducted periodically by the National Park Service, the National Trust and other organizations, colleges and universities.

In managing Fort Egbert, it is recommended that BLM have a full-time caretaker on site at the earliest opportunity. We think it important to provide for maintenance and periodic inspection of buildings on a year-round basis both during and after restoration. BLM, either through its own staff resources or cooperatively with the Historical Society of Eagle, should continue regular summer guided tours of Fort Egbert, including interpretation of the restoration process as well as the historic significance of the fort.

For long-term building maintenance, the maintenance manual prepared by Joe Clark (a separate document to be submitted later) should guide maintenance responsibility.



Figure 14. Quartermaster stables, April 1975. (Volz)



Figure 15. The granary, April 1975. (Volz)



Figure 16. The firehouse, April 1975. (Volz)

Figure 17. Quartermaster storehouse, April 1975. (Volz)

Figure 18. NCO quarters, April 1975. (Volz)



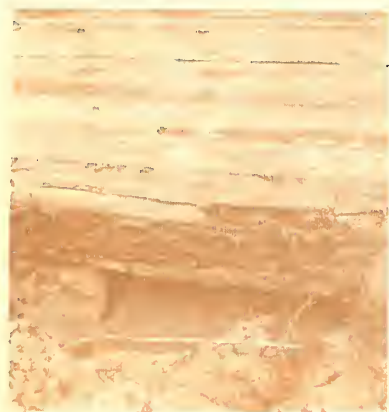


Figure 19. Quartermaster storehouse. Exposure of excavation of lower wall timbers at west end. (Clark)



Figure 20. Stabilization of foundation of the Quartermaster storehouse (left) and the firehouse (water wagon shed). (Volz)



Figure 21. Deteriorated condition of siding on the granary due to direct contact with soil. Note that four to six inches of siding at ground level are totally decayed. (Volz)

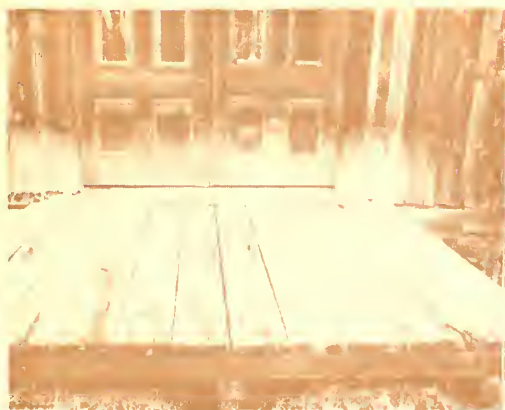


Figure 22. South porch of granary showing advanced decay in deck plank. Note decay fungus fruiting bodies on plank end-grain in foreground. (Clark)



Figure 23. South wall of NCO quarters from cellar. Note absence of foundation, rotted sill studs and line on sheathing indicating an earlier crawl-space soil height. (Clark)



Figure 24. NCO quarters, July 1975, with foundation stabilization completed and building in process of being reroofed. Roofing and replacement of rear shed addition will take place in 1976. (Volz)

Figure 26. Remains of dog sheds at mule barn. (Clark)



Figure 25. Condition of mule barn foundation at west end. Note angled shearing of post top in foreground. (Clark)



Figure 27. Ruins of second post hospital built in 1906. Remaining walls will be stabilized and potential hazards eliminated. (Volz)

Figure 28. Ruins of enlisted men's barracks. Stringers and joists are still visible. Ruins will be stabilized and identified with interpretive markers. (Volz)

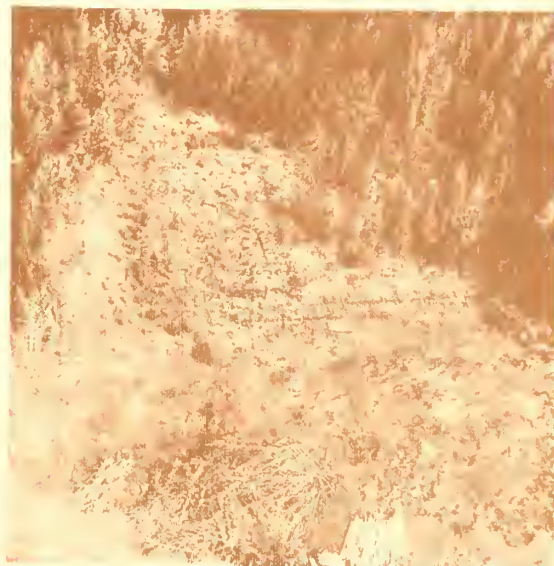


Figure 29. Remaining Fort Egbert buildings, with stabilization work under way on all but the stable, right rear. Open area in center is the old airstrip. (Volz)

CHAPTER 3

PRESERVATION IN EAGLE

Eagle will continue to change in the future just as it has in the past. Even so, Eagle has retained its basic historic character and appearance. The future may not be so kind to the community. Therefore, now is the time to plan for Eagle's future.

Two processes are already affecting Eagle--population growth and land sales. The community has evidenced a slow but steady population growth since the late 1960s. Substantial land sales during the past decade will accelerate that growth. Construction of approximately a dozen new buildings in the past 10 years, at least half of which are residences, tends to support the argument. It will be important for Eagle, then, to determine how new development will relate to the historic fabric of the community.

Tourism throughout Alaska is on the rise and current projections suggest that by 1980 Alaskan tourism will be 10 times the 1964 volume. In a four-year period, 1968 through 1972, the BLM campground at Mission Creek, near Eagle, experienced a 250 percent increase in visitor use, 50 percent of all users being from out of state. Current estimates suggest that by 1980, the number of vehicles entering Eagle on the Taylor Highway will be 80 to 100 percent above the 1970 volume.

Regardless of who ultimately manages Fort Egbert, whether it is the National Park Service, the Bureau of Land Management or some other agency, restoration and reconstruction of the fort and its grounds will encourage expanded tourism. Increased visitation will create new demands for tourist facilities--lodging, food, fuel, retail sales, parking and rest rooms. While the agency managing the fort must be prepared to assume certain responsibilities for visitors, some of the burden will clearly fall on Eagle. The physical form and the locations of such facilities will have a considerable impact on the historic character of Eagle, a fact that has both positive and negative implications. Tourism can expand Eagle's economic base and it can just as easily upset the visual and historical balance of the town if some thought is not given to these impacts.

These factors may not seem a serious threat to Eagle now. However, unplanned development has seriously eroded the prevailing character of many communities. Witness what is happening to Skagway. On the one hand, the town core is being restored. Simultaneously, incompatible new buildings--motel, grocery stores and restaurants--are being constructed both in and around the restoration area without consideration of their relationship to the historic appearance of the town. The prevailing character is changing rapidly. It is reasonable to believe that this type of unplanned development can and will happen in Eagle during the next decade unless steps are taken now.

It is not the intent of this report to argue against new construction. On the contrary, in anticipation of change, the intent is to evaluate what should be protected, including buildings, street layouts, open spaces, views and vistas, and to suggest some criteria for the community to use in evaluating new construction. This report also suggests guidelines for restoring, rehabilitating or adding to old, historic buildings.

LAND USE OBSERVATIONS

Eagle is laid out in a grid form, the predominant orientation being from the Yukon River on the east and extending approximately one-half mile to low hills on the west. The original 1898 plat laid out a system of north-south numbered avenues intersected by east-west lettered streets. Blocks, with several exceptions, were rectangular, 210 feet by 300 feet with 10-foot, east-west alleys, and were separated by streets of a 60-foot width. Lots were 50 feet by 100 feet, with certain exceptions. While some of the blocks and streets are no longer clearly visible from the ground, they still are evident in aerial photographs.

The original grid extended into what shortly became the Fort Egbert Military Reservation and, in late 1898, the military succeeded to all rights to those lands north of C Street. Thus, for practical purposes, the town of Eagle originally consisted of 18 blocks extending from Front Street on the banks of the Yukon to Sixth Avenue on the west and from C Street on the north to Jefferson Street on the south.

As the town and its needs grew, the grid was expanded and modified. Establishment of the School Reserve shortly after Eagle's incorporation in 1901 modified blocks 13, 14 and 15; the grid also expanded in a northwest-southeast direction along the banks of the Yukon. In 1908, F.E.G. Berry resurveyed the town and blocks were renumbered to reflect the loss of former blocks to the fort in 1899 and expansion of the town to the southeast.

In more recent years, additional land within the Eagle townsite has been surveyed to the west of the original town to establish an area known as the Western Addition. Lots subsequently sold in this area have generated recent construction. Because of the hilly, wooded nature of the Western Addition, these new residences are screened from view from within the old town of Eagle. Straightening the road, which currently cuts through platted blocks, to Eagle Village will open additional opportunities to acquire land for development.

While Eagle is reported to have had 500 cabins and a population of 1,700 people in 1898, many areas of the town were lightly developed or never developed at all. While Eagle's late 19th-century population exceeded its 20th-century population, the majority of people in the early years were transients. By winter of 1898, the population was estimated at 1,300; by summer of 1899, at 500; in late 1900, approximately 300 and by the 1920s, the population was less than 180. Undeveloped land in Eagle, even in relatively intensively developed blocks outside the commercial core, established an early tradition

of open space within the town--a tradition that has been maintained and should be maintained in the future. Where new development does take place outside the old commercial area, it should not be so intense that the sense of open space within the town, as well as around it, is destroyed.

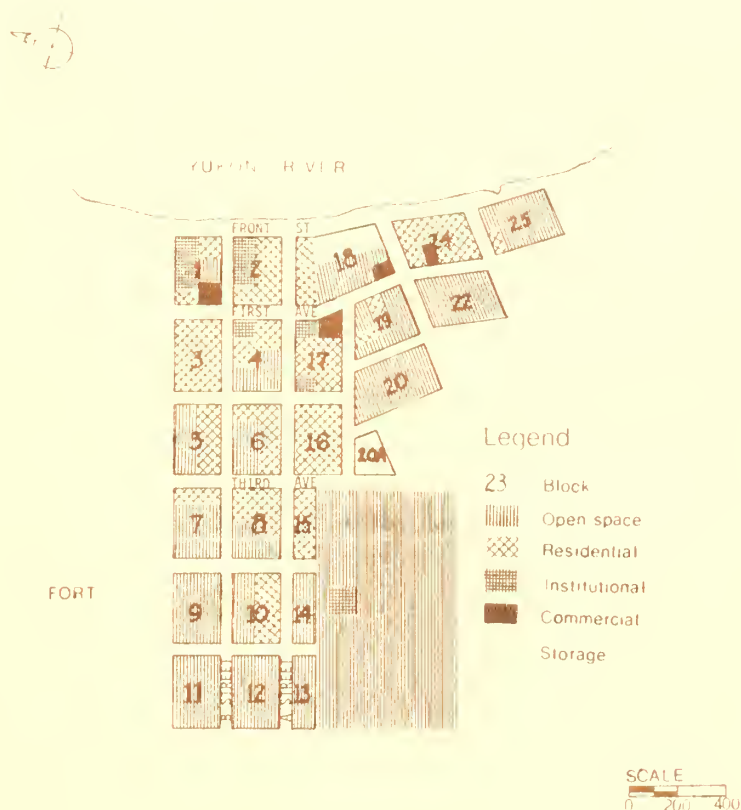


Exhibit 6
Eagle: Current Land Use

Historically, the most intensive development in Eagle was in its old commercial core, especially on those blocks fronting on the river from B Street to Jefferson, on First Avenue between A Street and Jefferson and on B Street between Front and First. Front Street was developed primarily by commercial and transportation companies for warehousing, shipping and retail commercial uses. B Street was the commercial center of town with saloons, a laundry, restaurants and dry goods. First Avenue was predominantly retail, where commercial establishments developed. The remainder of Eagle was residential, with a scattering of commercial uses, governmental (courthouse and jail, city hall and the School Reserve) and institutional uses (fraternal orders and churches).

While Eagle has retained its historic character, many of its old buildings

are gone. Of approximately 170 parcels that indicated improvements in 1910, about 70 appear to retain their buildings from that period. The greatest attrition has been on blocks 1, 18, 19 and 22 where today only 8 of 48 former buildings survive. Those blocks aside, nearly 50 percent of Eagle's older structures survive in varying degrees of repair.

The records indicate that structures on blocks 19 and 22 were mostly small cabins. Today, both blocks are undeveloped, except for two new residences on block 19 and two ruins of cabins on block 22.

The area most affected visually by the loss of historic buildings is the former commercial core, notably block 1 facing B Street and block 18. On Front Street, between A Street and Adams, only one building, part of Clyde Thompson's store, has survived. On the north side of B Street between Front and First, none of the nine structures evident in 1910 exist. Very possibly, with the decline of Eagle's commerce after the first quarter of this century, most of the buildings were lost because they no longer served economic functions. With the exception of the Riverside Hotel and part of Clyde Thompson's store, buildings that had subsequent commercial uses have been retained. Most of the commerce that exists today is concentrated on or near First Avenue (post office, Eagle Roadhouse, the new store, sporting goods), while the former commercial area is either open space or has assumed new functions (storage, museum, residential and workshop). In general, however, traditional land uses in Eagle have changed amazingly little over a 75-year period.

Whereas Eagle formerly led an active commercial life, today its businesses include the Eagle Roadhouse, a sporting goods outlet and a general store and gas station. However, increased tourism and even limited population growth could create demands for expanded services. Some new businesses could utilize existing structures, but there will clearly be a demand for new commercial construction in the future.

Too often in smaller communities, new commercial enterprises locate in a haphazard fashion, unrelated to the prevailing character of the community or to existing land uses in particular areas of the town. In a town the size of Eagle this approach to development could have detrimental effects on the very qualities that make Eagle distinctive. Arbitrary development can lead to the destruction of older buildings and to changes in land use affecting residential areas.

Where possible, new businesses coming into Eagle should be encouraged to utilize existing structures. The Biederman General Store again could function suitably as a general store and gas station or as a roadhouse. The Taylor Building could be used for retail purposes or as a restaurant, should the community decide that use as a civic center is not acceptable. Also, the old Northern Commercial (NC) Company buildings on Front Street could be returned to commercial use.

Where new commercial construction is contemplated, owners should be encouraged to develop within areas appropriate for such purposes. Ideally, with certain controls exerted over design and siting, these businesses should

reestablish the commercial center of the town. The south side of block 1 and block 18 facing on both Front Street and First Avenue could be appropriate places for development of new business.

It is suggested that any new businesses locating in these areas be guided by traditional design factors in Eagle's development.

1. Historically, business buildings in Eagle were sited with their entrance facades on the property lines facing the street. New buildings should follow this pattern.

2. Commercial buildings generally were built the depth of the lot, not the width of the lot. New buildings should follow this pattern, building back from the street frontage, not the length of the frontage. If a commercial building is more than 30 feet wide, the facade should be interrupted at shorter intervals to avoid the appearance of excessive mass along the street. This could be accomplished, for example, by using a small recess in the facade at the lot line or by building two separate structures, linked at a depth behind the lot line.

3. The traditional building material on Front Street, with several exceptions, was wood frame. Frame buildings were used for commercial purposes, although several metal structures were erected to serve as warehouses. This tradition should be continued with new construction on Front Street. This is not to suggest that new buildings should be copies of old buildings in style, but they should use materials that relate to traditional Eagle building materials. For example, the metal shop building at the south end of block 18 is essentially appropriate in character. It would have been desirable, however, if the building had been oriented to Front Street rather than to Adams Avenue. At present, it is set back from the lot line and extends the length rather than the depth of the lot, not maintaining the historical design tradition in Eagle.

Today parking is not a problem in Eagle, but tourist visitation and the potential for population expansion could create a need for parking space in the near future. With projections of 6,000 to 6,500 automobiles entering Eagle annually by 1980, need for more parking space becomes evident. Completion of the Fort Egbert restoration project, coupled with anticipated restoration work in Eagle and the on going summer guided tour programs of the Historical Society of Eagle, will result in the number of vehicles being even higher. If 1,500 of the automobiles entering Eagle are local, 4,500 to 5,000 cars annually would be tourist vehicles. The bulk of those 5,000 vehicles would enter Eagle during June, July and August. With an estimate of 1,500 cars per month, Eagle could have 50 or more tourist automobiles on any given day.

Since Eagle is essentially a pedestrian community, the visitor has little need for an automobile. Virtually everything can be reached on foot both in the town and at the fort. Therefore, a well-located parking area central to both the fort and the town is suggested. This facility should not be visible from either the old town of Eagle or the fort grounds.

It is recommended that block 9 be used for visitor parking. While this block was once occupied by several cabins, none remain today. Block 9 is only 100 yards from the fort and less than 400 yards from the center of Eagle, providing convenient access to each. The parking area should accommodate 75 to 100 automobiles--adequate for visitors to Eagle and Fort Egbert for the foreseeable future. The parking area should be well screened from view by grading and landscaping.

Approximately 40 percent of all parcels in Eagle are either residential or used for purposes directly associated with residences (parking, gardens, storage, etc.). It is the residential character of Eagle, with its mixture of older log and frame houses, that is particularly important.

Early photographs of Eagle indicate that the visual appearance of many houses has changed little over 60 to 75 years. Many photographs show vegetable gardens beside the houses, just as they are today. While these gardens are a necessity to Eagle's year-round residents, they are also a pleasing visual amenity. Gardening is an Eagle tradition that should be encouraged in the future.

Those areas of Eagle in which residential use predominates should continue in residential use. In order to retain the residential character of Eagle, commercial activities should be confined to certain specified areas.

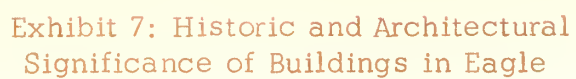
Eagle's residential blocks have special characteristics that should be preserved and enhanced. Residential structures are nearly all log or frame. Unfortunately, some newer structures, while built of the same materials, are different in scale, form, color and siting from older Eagle buildings. Criteria can be developed to aid persons building new residences so that these structures relate more successfully to Eagle's older buildings.

TYPES OF HISTORIC BUILDINGS IN EAGLE

Only a few of Eagle's old buildings have national or state historic significance (see Exhibit 7). These buildings are the courthouse important for its association with the development of civil law in interior Alaska; the Wickersham house, associated with a major person in Alaskan history⁵; the Eagle City Hall, the seat of local government in the first incorporated town in interior Alaska; and the Amundsen cabin, associated with an internationally famous explorer.

Other buildings are also significant because of their importance in Eagle. These structures include the Episcopal Church, the original school-house and the present school, the NC Company buildings on Front Street, the old custom house, the Eagle Roadhouse the Roman Catholic Church, Red Men Hall and the John Powers' house and barn.

Some buildings are important as architectural types including the NC Store on Front Street, Jim Layman's house (the last commercial structure of



its type in Eagle), George Beck's house, Elmo Stout's house (the former Abe Malm house), the Merly's log cabin at First and B, the log cabin on block 6 facing Second Avenue and the log house at the corner of Second Avenue and Jefferson Street. The Taylor building is significant both for its importance in Eagle and as an architectural type.

Most of the remaining old structures should be retained, for they establish both the setting for individually important buildings and the overall architectural character of Eagle. To lose them would be destructive to Eagle's historical integrity. Therefore, efforts to stabilize deteriorated older "background" buildings before they are lost should be encouraged. The relationships of a grouping of structures of the same approximate period and appearance is far more important than any individual structure. As the old buildings are lost or new buildings introduced without some control over appearance, the feeling of the entire block can be disrupted.

On the following pages common building types and relationships found in Eagle are identified and some criteria established to guide rehabilitation of older structures and the design of new buildings.

First, regardless of age of the buildings surveyed in Eagle during July 1975, 58 are built of log, including at least five that are now covered with siding; 33 are frame construction; six are built of metal; five of plywood; and one (Powers' barn) of frame and metal. The most common building material traditionally, then, has been log.

Four basic types of log building were identified. Two are common to older structures and two relate to newer construction. Almost without exception, older log buildings have certain common characteristics. The structures have low-pitched gabled roofs with a gabled wall facing the street. The common visible roof material is metal, sometimes flattened metal fuel cans. In a number of cases, the metal roof was laid directly over an earlier roof of either shingles or boards, and many older roofs may still have interior layers of dirt insulation. Almost without exception, the entrance door is in the gable end facing the street.

A prominent feature distinguishing many older log structures is the projecting eave overhanging the gable wall. Where the projection is evident, the overhang may extend two to three feet from the building. In many instances, the overhang has been enclosed partially or completely to form a winter storm entrance. While the basic building is of log construction, the winter entrances are almost always of frame construction. About 55 percent of the houses have the projecting overhang and 45 percent do not.

Features common to most log buildings are:

1. The entrance door usually is slightly to one side of the ridge gable and flanked by a single window, creating a symmetrical facade. The flanking window is generally a casement window with three lights over three or a double-hung sash with six lights over six.

2. Commonly, side facades have windows that are either casement or double-hung sash or, occasionally, a combination of the two.

3. Many of the log residences have rear additions, which normally extend the depth of the lot rather than its width. These additions are generally log, although in several instances, they are of frame construction.

4. Typical dimensions of the main cabin are 14 by 16 feet, 14 by 18 feet and 15-16 by 18 feet, although there are many exceptions. Additions are of the same or slightly reduced dimensions.

5. Outbuildings, if they exist, are normally to the rear of the property.

6. Most commonly, the house is built to the front property line.

7. Generally, log structures are either one or occasionally one and one-half stories in height. They vary in height from approximately 8 to 15 feet from ridge to ground. The average height appears to be 10 or 11 feet.

8. Log buildings are typified by their grayish-brown color.

Two types of newer log building are found in Eagle: those built of conventional or three-sided logs and those built of manufactured three or four-inch twin tongue-and-groove logs. In and of themselves, these materials are not incompatible with the prevailing character of Eagle's older buildings, although conventional logs should be considered preferable to tongue-and-groove logs. The tongue-and-groove logs differ in texture and size from the logs that generally establish the overall visual appearance of Eagle's older buildings.

Several of Eagle's newer log structures, utilizing both tongue-and-groove and three-sided logs, fit relatively well with the prevailing character of older log buildings.

Tongue-and-Groove

Eagle Post Office

1. The building is properly sited, a gable end oriented to the street, with the entry door in the gable and the building located at or near the front property line.

2. The form and dimensions are compatible with Eagle's older buildings. The low-pitched gable roof is characteristic of Eagle, as is the appearance of two rear additions to the building. Its dimensions (approximately 15 by 35 feet) are in keeping with older log buildings.

3. The brown color, while different in tone than older buildings, is acceptable.

4. The use of three-light casement windows in the east and west

facades is basically compatible with Eagle's character. However, the full length three-paned windows flanking the door in the gable end are not in character. Smaller windows with a total area of glass reduced to the approximate dimensions of typical six-over-six-light double-hung sash would have been more appropriate.

Overall, the building is a positive contributor to the character of Eagle.

Conventional or Three-Sided Log Structures

Five log buildings that have been constructed in recent years have one characteristic in common that has an adverse affect on the character of historic Eagle--their color. The light ochre color of these structures contrasts and clashes with traditional building colors in Eagle, as does the color used in several instances for roofing and trim. Use of a stain prior to preservative treatment of new logs should be encouraged to tone down their light color. Several of these structures, however, are essentially compatible with Eagle's older buildings.

Block 18, lot 11 (This building was viewed while still under construction and reactions to it are of a more general nature.)

1. As a commercial structure, this building is not a serious intrusion in Eagle, although it has modified the appearance of its immediate environs. The building would have been more successful had the gable wall been oriented to First Avenue rather than perpendicular to the street, taking advantage of the depth rather than the width of its lot. The building is properly located at or near the property lines.

2. The basic dimensions are roughly the same as the old NC Company Store on Front Street and essentially complementary.

3. The light-colored logs are in contrast to older log structures. The contrasts could be softened here (and in future construction) by staining the logs a dark color.

4. Window placement and sizes are generally compatible, although one or two casement windows in the front gable end would have been a positive addition to the appearance of the building.

This building would be considered compatible, except for its log color and orientation on the lot.

Block 19, lot 7

1. At the time of the survey, this was the only building on block 19. In its directional expression, gable wall orientation to the street and placement on the lot, it is compatible with the character of Eagle. The entry door in the gable end, the flanking window and projecting overhang are appropriate.

2. In its form, dimensions and roof pitch, this building is appropriate. It would have been more pleasing without random projecting log ends at building corners. Its one-story height is compatible.

3. As in other new log buildings, the light log color is not appropriate to Eagle.

4. Placement of windows and doors, and their dimensions, is characteristic of Eagle.

Overall, this is probably the most successful new log building in Eagle. Except for the log color and projecting log ends, it is a good example to follow.

Block 5, lot 9

1. This new log cabin is properly oriented to the street, with a gable end facing B Street. Possibly, it should have been located closer to the front property line.

2. In its form and dimensions, this house is basically compatible with the prevailing dimensions of older buildings, although it is slightly wider than the 14 to 16-foot average. It's low-pitched gable roof with projecting overhang is characteristic of Eagle, though random projecting log ends are inconsistent.

3. The light-colored logs and the use of red for trim are not consistent with colors used on older buildings. Staining the logs a color consistent with older buildings and repainting the trim white would make this a particularly successful new building.

4. Window and door sizes and locations are appropriate.

Both this cabin and the one referred to on block 19 are generally good references for future new log construction within the historic core of Eagle.

DEVELOPMENT AUTHENTICITY

Several older log cabins are good examples of Eagle's log architecture and could be referred to by builders for authenticity. They are located at block 3, lot 11; block 6, lot 1; block 17, lot 9; and block 6, lot 8.

One additional recent cabin, located on block 18, lot 4, which appears to have been constructed using older or well-seasoned logs, meets virtually all criteria for orientation, door, and window placement and size, shape, dimensions and color. It is a most successful building.

In the following areas of Eagle, log should be considered the preferred building material to maintain the visual continuity of the town. This list includes blocks that are occupied by buildings at present, largely because if additional losses are sustained by fire, deterioration or demolition,

consideration must be given to appropriate replacement.

Block 1 (north $\frac{1}{2}$)	Block 8
Block 2 (particularly the west $\frac{1}{2}$)	Block 15
Block 4 (all but lots 1,2 and 3)	Block 16
Block 5 (south $\frac{1}{2}$)	Block 17
Block 6	Block 18 (except those lots facing Front Street)

In the following areas, log should be considered an acceptable building material:

Block 2 (facing Front Street)	Block 19
Block 3 (south $\frac{1}{2}$)	Block 20
Block 5 (north $\frac{1}{2}$)	Block 20A
Block 7	Block 21
Block 9	Block 22
Block 11	Block 23
Block 12	Block 24
Block 13	Block 25
	Block 26

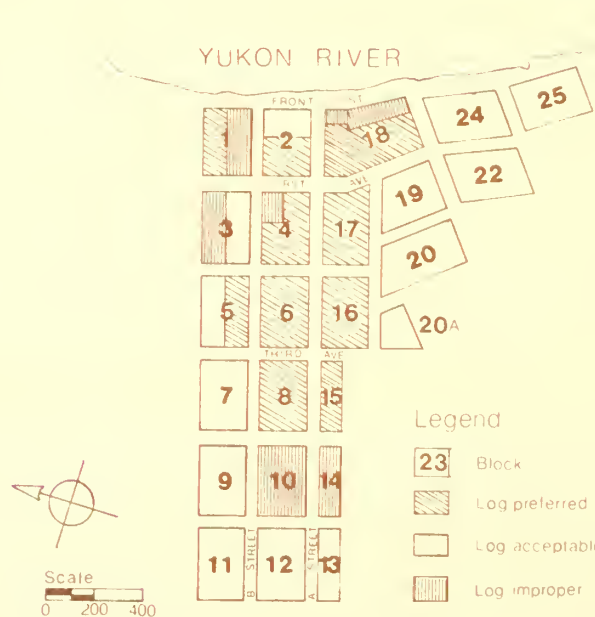


Exhibit 8: Suggested Areas for Log Buildings

In the following areas, log should be considered inappropriate, in general, and therefore an undesirable building material:

Block 1 (south $\frac{1}{2}$)	Block 10
Block 3 (north $\frac{1}{2}$)	Block 14 (location between school and Powers Buildings)
Block 4 (lots 1, 2 and 3)	Block 18 (facing Front Street)

In Eagle, approximately 35 buildings are of frame construction or appear to be log construction later covered with drop siding. In the survey of Eagle in July 1975, no new buildings of frame construction were identified. Presumably, the Biederman General Store was the most recent frame building erected in Eagle.

There are three distinct types of frame-appearing structures with their own peculiar characteristics--frame (or partly frame) commercial buildings, frame houses and log buildings later covered with drop siding.

Those that appear to be log buildings later covered with siding are commonly smaller than true frame structures and have the basic form of log buildings. The Amundsen cabin is a good example. It is a low, one-story cabin, with a gable end oriented to the street, its central door flanked by three-over-three-light casement windows. It has a slight projecting overhang that is not characteristic of Eagle's true frame buildings.

Five of these buildings were located and there may be others. Three were easily identifiable--the Amundsen cabin, the Wickersham house and the cabin on block 8, lot 3. Two others are deceiving because their appearance is less that of a log structure. These are located on block 1, lot 10 and block 1, lot 8 (south $\frac{1}{3}$).

The siding on these structures is drop siding. Except in the two buildings on block 1, where double-hung sash has been used on the street facade, windows are casement type. The use of new construction materials in proximity to these buildings should be dictated by the prevailing materials of other buildings.

While it is not a residential structure, the Eagle Roadhouse is also a log building later covered with frame. In its present form, it appears more characteristic of frame than log buildings, however.

Like log buildings, Eagle's frame residences have gable roofs, with a gable oriented to the front property line. Generally, the buildings are constructed at or near the property line. The entrance is located in the front gable end and is flanked by one or two windows (one if the entry is off center, two if the entry is centered). Most commonly, windows are six-over-six-light double-hung sash, although several frame structures have casement windows.

Generally, frame houses appear larger than most log houses and more sophisticated in design. Frame houses typically have a shed roof porch, sometimes with a winter entrance enclosed within the porch. Drop siding is typical.

Several houses are one story and several others are two story, but the

majority are one and one-half stories, often with a casement window in the gable of the street facade. Side windows are most commonly double-hung sash, although some casement windows are evident.

Colors of frame structures are characteristically white, off-white, cream or light green or the structures are unpainted. The most typical trim color is traditionally dark green although white is occasionally used.

The most notable examples of frame residences in Eagle are the old Abe Malm house (now owned by Elmo Stout), the George Beck house and the Powers house at the corner of A Street and Fourth Avenue.

Shed-roofed additions to the rears of frame residences are common. Occasionally, additions are evident to sides rather than rears of buildings.

In future new construction, frame will be the preferred building material in the following areas:

Block 3 (north $\frac{1}{2}$)	Block 14
Block 4 (lot 3)	Block 18 (facing Front Street)
Block 10	

In the following areas, frame would be an acceptable building material:

Block 3 (south $\frac{1}{2}$)	Block 19	Block 26
Block 5 (north $\frac{1}{2}$)	Block 20	
Block 7	Block 20A	
Block 9	Block 21	
Block 11	Block 22	
Block 12	Block 23	
Block 13	Block 24	
	Block 25	

In the following areas, frame would be inappropriate and should therefore be discouraged:

Block 1 (north $\frac{1}{2}$)	Block 15
Block 2 (west $\frac{1}{2}$)	Block 16
Block 4 (except lots 1, 2 and 3)	Block 17
Block 5 (south $\frac{1}{2}$)	Block 18 (except lots facing Front Street)
Block 6	
Block 8	

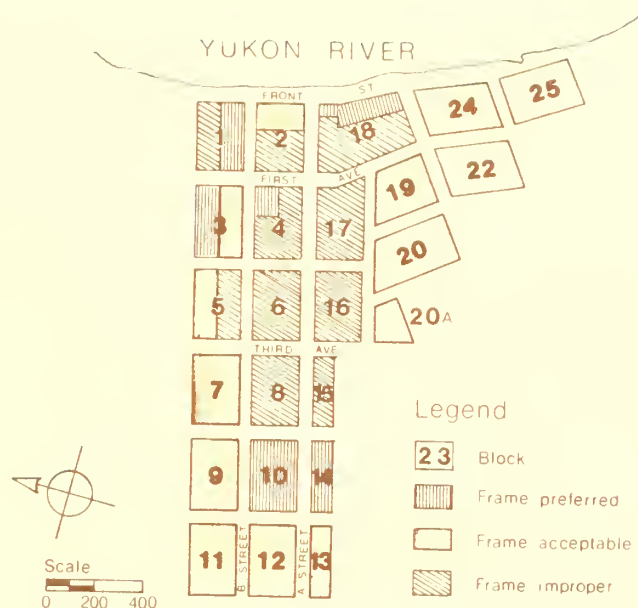


Exhibit 9: Suggested Areas for Frame Buildings

There is some recent use of plywood as an exterior construction material. Plywood is not in character with Eagle's older buildings and, if used, should be sheathed with drop siding or clapboards. Siding should be painted using exterior paint colors traditional to Eagle.

Eagle also has a number of commercial and institutional buildings of frame or frame and log construction. Because many of these are public buildings, they will be discussed in detail later. Clearly, Eagle's public and older commercial structures dominate the appearance of the historic commercial area. The courthouse and well house are Eagle's two most prominent features, historically and visually.

The Biederman General Store is also an important, although much later, building. While appearing later, in its size, siting, scale, proportions and paint colors, it is reminiscent of several former buildings located on the south

half of block one. The Biederman Store and the Taylor building should guide design in any new construction along B Street between First and Front. New buildings should be of frame construction, one and one-half or two stories high, built to a height of 18 to 20 feet at the ridge line, with gable ends fronting on the B Street property lines. The frontage width should be built to within 10 percent of the two existing buildings, not to exceed 33 feet wide. Buildings should be proportioned in depth to maintain the traditional ratios of commercial structures. Traditional proportions of width to depth are 1:2 or 2:3.

Large individual panes of glass should not be used and the total area of glass should be divided by vertical and horizontal muntins. A commercial building on B Street should have storefront windows and doors occupying between 30 and 50 percent of the facade square footage.

The basic building colors should be white with white or dark green trim.

Four buildings, three with wood facades, establish the appearance of Front Street. Two buildings, Jim Layman's house and the NC Company store, have false fronts. Three of the four are wood buildings. The remaining structure, the NC Company warehouse no. 3, is corrugated metal. On block 2, the average height of buildings is about 22 feet. The height of the one remaining Front Street building on block 18 is about 16 feet.

Among the four buildings, there is great architectural variety in roof shape, entrance placement and materials. However, wood frame or metal are the preferred construction materials and buildings should be oriented to the street, the longer facade dimension extending the depth rather than the width of the lot.

The buildings remaining on Front Street are critical to the appearance of the old commercial part of Eagle. Every effort should be made to assure that no additional buildings on Front Street are lost. Any new construction on Front Street should be located on block 18 and the street appearance on block 2 should not be altered. If new buildings are erected on block 18 facing Front Street, they should be designed carefully to relate to the one remaining older building in proportions (relationship of height to width and of width to depth), setback (buildings should be located on the Front Street property line), materials (frame is preferable, metal is acceptable), roof shape (gable or false front) and orientation. Good photographic evidence of the former appearance of the street exists and should help guide any new construction. Care should be taken to screen any land uses on Front Street that are inappropriate to the character of the street by placing them to the rear of buildings or by screening them with landscaping. Ideally, such uses should be relocated to places where the visual impact is less severe. Metal structures should attempt to follow the basic dimensions of the NC Company building on Front Street.

DETERIORATION

Generally, causes of deterioration in older structures in Eagle are the same as those evident at Fort Egbert. Specific requirements to correct

deficiencies in certain buildings are discussed later in this chapter. As a general rule, the foundations of log, frame and log and frame structures will have moderate to severe deterioration. Where earth has been mounded against exterior walls for insulation, deterioration may extend above the ground line. There may be deterioration to floor joists, sub-floors and floors, largely depending on the presence or lack of a crawl space with proper ventilation.

On buildings that are used and maintained, conditions above ground appear to be fair to good. It is important that roofs be properly maintained to prevent deterioration to rafters and ridge poles, especially where the roof has a layer of dirt insulation. As long as the dirt is kept dry, it will not cause deterioration. In those buildings where roofs have not been maintained, there is evidence of serious deterioration.

RECOMMENDATIONS FOR PRESERVATION

1. Rehabilitation of existing buildings.

a. In rehabilitating or restoring privately owned residences, out-buildings and commercial structures, every effort should be made to preserve the character and appearance of older buildings.

b. Additions to older buildings should be executed in the same materials as the original. However, on log buildings, it could be acceptable to construct an addition in other materials, if the exterior were covered with drop siding or clapboards of six or eight-inch widths. Windows on additions preferably should be three-over-three-light casements or six-over-six-light double-hung sash. However, the prevailing window treatment on the building should be the determining factor in window treatments on additions. Additions should follow the prevailing directional expression of the ground plan of the building (normally extending the depth of the lot). Additions should also have a horizontal rather than a vertical emphasis, duplicating the existing emphasis of the building.

c. In any replacement of windows or doors, the original window or door should be duplicated in materials and appearance.

d. In replacement or repair to porches, roof form, supporting posts and materials should be duplicated as closely as possible. One of the better recent examples of this is the house on block 3, lot 4.

e. When new wood is used, it should, ideally, be pressure-treated with pentachlorophenol. At a minimum, wood should be given a surface treatment of pentachlorophenol.

f. In general, metal roofing is preferable to shingle roofing since it withstands climatic conditions in Eagle better than shingles. If owners elect, however, to reproduce original shingle roofs, the shingles should be pressure-treated and fire-retardant, duplicating the dimensions of the original shingles. They should not be random-width shingles.

g. Paint colors should duplicate original colors where possible. If not possible, they should be colors traditionally used in Eagle. On log structures, painting should be limited to trim, doors, porches and (possibly) exposed log ends. Preferred colors are white, dark brown or dark green. Normally, only one color should be used. Where trim has not been painted, an alternative is to treat wood with pentachlorophenol, seal it and leave it in its natural state.

On frame buildings, only two paint colors are generally evident--one for the bulk of the building and one for trim and details. In some cases, only a single color was used.

Where possible, original paint colors should be used to duplicate the original appearance. The basic building colors traditionally found in Eagle are white (most common), cream, yellow ochre (a light yellow brown) and, occasionally, dark red. Trim is most commonly painted dark green, although white is used occasionally.

h. In replacing rotted logs, it is preferable to duplicate original log dimensions if the log will be above grade and visible.

i. In foundation work, the most maintenance-free materials should be used. Concrete footings below ground and not visible are acceptable. Any wood materials should be pressure-treated prior to installation. In foundation work, it would be advisable, where possible, to raise buildings and excavate a crawl space. A visqueen vapor barrier should be established between soil or concrete and wood members to reduce moisture penetration of wood. If side walls are to be banked with earth, a vapor barrier should be established between walls and earth as well. However, a preferable alternative to banking soil would be to insulate between floor joists while doing foundation work.

If anyone should undertake work this extensive, it is suggested that buildings be wired for electricity simultaneously. It will be easier and less expensive in the long run to do the wiring as part of a total package. While electrical service is not generally available in Eagle today, within the next few years it will be. If basic electrical work is performed now, it will be a simple matter to hook up to electrical sources at a later time.

With work currently being performed at Fort Egbert, people involved in project construction have a body of knowledge that can be utilized in any major work on Eagle houses. It will, therefore, be possible to obtain most skilled workers without going outside the community.

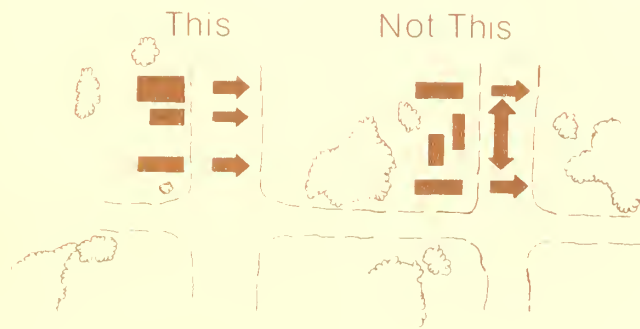
2. New construction

a. For all new construction, references in the section on rehabilitation relating to paint colors, chemical treatment of materials, foundation construction and insulation are applicable.

b. On block frontages where log is the prevailing construction material, it should also be the preferred material for new construction. Where frame is the prevailing material, new buildings should be of frame

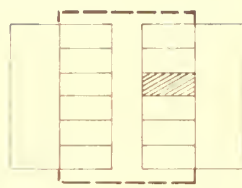
construction. Where there is a mixture of frame and log, the preferred construction material should be determined by the strongest design influences affected by the new building. The new structure should take into account the prevailing influences of structures within sight of the new building.

For construction on a corner lot, generally the sphere of influence will be the four corners of the intersection, the two lots adjacent to new construction and the three lots on the opposite side of the street from the area of new construction. If a prevailing influence cannot be determined, then either log or frame is acceptable.



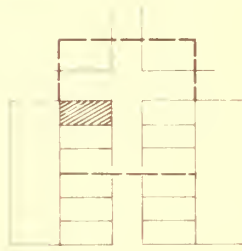
Directional Expression

When a new building is being constructed on an interior lot within a block, its sphere of influence will be all lots on the same street frontage, on its same block and on the block facing the development parcel. Where no prevailing influence can be determined, either log or frame is an acceptable construction material.



1

THE SPHERE OF INFLUENCE WHEN CONSTRUCTING A NEW BUILDING ON AN INTERIOR LOT IS ANY LOT FRONTING ON THE SAME STREET AS THE LOT IN QUESTION AND LOCATED IN THE SAME BLOCK OR ON THE OPPOSITE SIDE OF THE SAME STREET.

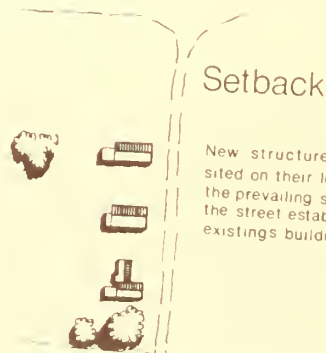


2

THE SPHERE OF INFLUENCE WHEN CONSTRUCTING A NEW BUILDING ON A CORNER LOT IS ALL ADDITIONAL CORNER LOTS FACING THE SAME INTERSECTING STREETS, THE TWO LOTS ON THE SAME STREET ADJACENT TO THE LOT IN QUESTION AND THE THREE LOTS ON THE OPPOSITE SIDE OF THE SAME STREET FACING THE LOT IN QUESTION.

Influence of Existing Building Material on New Construction

c. Setback, building orientation and building height should maintain the prevailing character of the block on which the building is located and the block facing the development parcel. Where no prevailing influence is evident, the front facade should be set back from the front property line no more than 10 percent of the lot's depth (a maximum of 10 feet on most lots and slightly more or less on certain odd lots). In almost all instances, the width of the building will face the street and its depth extend the depth of the lot. Building height should be within 10 percent (plus or minus) of the average height of buildings within the sphere of influence.



Setback

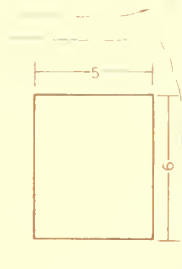
New structures should be sited on their lots following the prevailing setback from the street established by existings buildings

d. Log residences.

1) In new log construction, buildings should have gable ends with a low pitched roof, the entrance door located in one gable end and flanked by one window if the door is off center and two windows if the door is centered beneath the roof ridge. Windows should be either casements with one to three panes horizontally or double-hung sash with either four-lights-over-four or six-lights-over-six. Window shapes and sizes should approximate those of the same kinds of windows on older buildings.

2) If light-colored or unseasoned logs are used, they should be stained to approximate the color of older logs before being sealed or varnished.

3) In overall dimensions, new buildings should approximate dimension values common to older log buildings within the sphere of influence. It is understood that many old log buildings, however, are of dimensions too small for today's living standards. Basic building dimensions should not exceed the largest module common to older Eagle buildings (15 by 18 feet) by more than 25 percent as a rule, maintaining a width-to-depth ratio of 5:6. Additions or extensions should be located to the rear of the main structure, should not exceed its width and should have the visual appearance of being a separate module.



LOG residences have an average width to length ratio of five wide to six long. The 5:6 ratio should be maintained in new log residences.

4) Outbuildings should generally be located to the rear or side of the main building and set back from the front facade.

e. Frame residences.

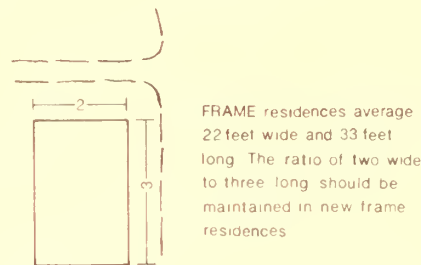
1) Plywood should not be considered acceptable exterior covering. Where it is used, plywood should be covered by drop siding or by clapboard. Siding should follow the prevailing width of siding commonly used in Eagle, either 1 by 8-inch or 1 by 6-inch. While wood is the preferred siding material for new frame buildings, aluminum siding would be acceptable, providing it follows criteria for color and dimension.

2) Frame buildings should follow the prevailing setback, height and proportions of their sphere of influence as described in 2.c.

3) Frame buildings should have gable roofs with a gable end facing the street and with the entrance in the front gable end, flanked by one window if the door is off center and by two windows if the door is centered. Preferable window treatment is six-light-over-six double-hung sash, although casement windows following traditional proportions would be acceptable. Plate glass windows visible from public view would be inappropriate to the character

of Eagle's buildings.

4) Older frame residences in Eagle average 22-feet wide and 33-feet deep, excluding additions. New frame structures should be built to within 20 percent of common dimension, not to exceed 26 feet in width by 39 feet in depth, retaining the approximate 2:3 ratio of width to depth, modified as necessary by the prevailing character of the sphere of influence. Any greater floor space should be accommodated by rear additions executed with the same exterior siding as the main structure.



5) Frame structures should be one and one-half stories in height, as a rule, although two stories would not be out of character, provided the building height is within 10 percent of the average within the sphere of influence.

6) "Ranch," "split level," "Dutch Colonial" and "colonial" style houses would not be appropriate to Eagle's historic area. Such styles would be destructive to the historic appearance of the town and should be confined to the Western Addition or to areas in the Southeast Addition, which are screened from the historic area.

f. Corrugated metal should be used as an exterior construction material only in those areas where it was used historically. Metal buildings should approximate the dimensions and overall appearance of the NC Company building on Front Street. They should be oriented to the street, running the depth rather than the width of their lots. Window and door openings should follow traditional Eagle proportions and placements, using the NC Company building and old photographs for reference.

g. Commercial area.

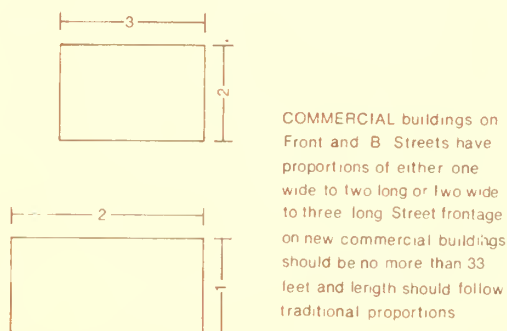
1) Construction materials should be those materials recommended for various areas in Eagle and the prevailing materials within a specific sphere of influence.

2) Buildings should be constructed to the front property lines with gables, false fronts or parapet facades facing the street. Generally, entrances should be centered in the facades and flanked by windows.

3) Signs should be either of wood or written directly on the facade of the building. The use of plastic signs or, when possible, electrified signs, is inappropriate in Eagle.

4) Generally, structures on block 18 facing Front Street should be one and one-half or two stories in height, not to exceed 25 feet.

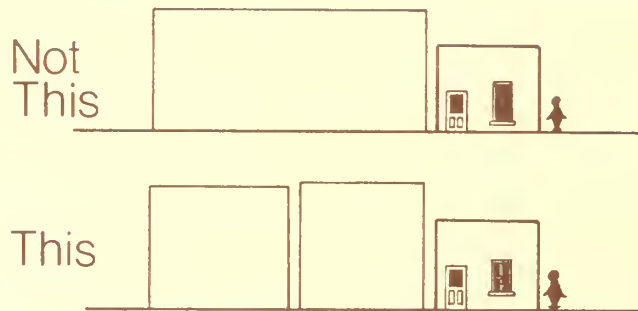
5) Buildings on B Street should be one and one-half or two stories in height, not to exceed 25 feet, with orientation the depth of the lot. Buildings on First Avenue should be either one or one and one-half stories in height, not to exceed 20 feet and oriented the depth of the lot.



6) Where logs are used for construction they should be stained a dark grayish-brown color. Light-colored logs conflict with the prevailing character of Eagle's older log structures. Use of contemporary tongue-and-groove logs should not be encouraged. Where tongue-and-groove logs are used, they should be dark in color, like the Post Office or the cabin at the Eagle Roadhouse.

7) Large plate glass windows should not be used. The preferred window module would be six-light-over-six double-hung sash. Where large windows are used, they should be formed by combining several six-over-six sash modules, producing a window configuration similar to those of the NC Company store and the Taylor building. Window panes should be no larger than 11 by 14 inches.

8) Basic building proportions should approximate traditional proportions. No new building should exceed 66 percent of a 50-foot lot width (maximum 33-foot frontage) or 33 percent of a 100-foot width (e.g., the corner of Front Street and A Street on block 18, a rare instance where orientation would preferably be to the east although lot 1 is a north-south lot). When a developer-owner constructs a building with a greater frontage, the facade should be divided into clearly definable segments, approximately 30 feet each, to avoid excessive massing out of character with traditional building proportions in Eagle.



WITHIN THE COMMERCIAL AREA, BUILDINGS SHOULD NOT EXCEED A THIRTY FOOT WIDTH. IF AN OWNER WISHES TO CONSTRUCT A BUILDING WITH GREATER FRONTAGE, THE FACADE SHOULD BE DIVIDED INTO DISTINCT SEGMENTS, LINKED BEHIND A RECESS, TO MAINTAIN TRADITIONAL FRONTAGE RELATIONSHIPS.

9) An area adjacent to the Taylor Highway entrance to Eagle, in the vicinity of the Western Addition, should be considered as an alternative location for any new commercial development that is clearly out of character with Eagle's older commercial core. Controls over design or signing in this area should be less restrictive than in the central part of Eagle. Any such development should be screened with trees and landscaping so it is not visible from the center of Eagle.

h. Long-term maintenance. Joe Clark has developed a maintenance handbook for long-term maintenance, period inspection and the use of chemical treatments for buildings at Fort Egbert and in Eagle. This will subsequently be made available.

EAGLE'S HISTORIC PUBLIC BUILDINGS

Public buildings in Eagle are among the most important historically to the town and should be stabilized and repaired or restored to prevent further deterioration. Particular attention should be given to the courthouse, well house, custom house, city hall and the Taylor building.

Current plans call for restoration of the courthouse in 1976 with subsequent stabilization of remaining public structures in 1977 and 1978. Plans and specifications with an accompanying description for courthouse restoration were forwarded as a separate document to the Eagle City Council early this year. Plans for restoration or repair of additional public structures will be developed in the summer and fall of this year (1976).

The following pages provide a brief historical overview of five public buildings in Eagle with an analysis of conditions as found in the summer of 1975. A summary of recommendations to remedy building deficiencies is included for each structure.

Because it might not be possible to stabilize and repair all buildings in 1976-77, a recommended approach to phased preservation is included, should construction work be continued over additional years.

Courthouse

History and Description

The Federal Courthouse in Eagle was completed during April in 1901 at a cost of \$8,000. A letter from Judge James Wickersham to the United States Attorney General indicates that originally the building was to have been a one-story sawed log structure with a sod roof. However, the courthouse constructed was a two-story frame building, insulated with sawdust and capped with a gabled shingle roof.

Judge Wickersham requested the commander of Fort Egbert to supply lumber from the post sawmill to construct the courthouse but was advised that the sawmill could only be used for that purpose with permission from the U.S. War Department, and even with permission, the court would have to supply its own logs. In December 1900, permission was granted; in January 1901, a court order calling for bids for labor was issued; and in February a contract was awarded to Howard and Dribelbis based on their low bid of \$2,000 for labor to construct both buildings. Carl Johanson supplied lumber for the project, and it was cut at the Fort Egbert sawmill. Hardware was purchased at local stores. The courthouse was completed April 22, 1901, and served as the headquarters of the Third Judicial District in Alaska until July 1904, when Fairbanks became headquarters. Eagle retained a United States commissioner and deputy United States marshal until 1951.

While Judge Wickersham's letter to the Attorney General indicates a one-story log structure would be built, there is no evidence that the courthouse was built in other than its present form. Early photographs indicate a two-story frame structure with a one-story porch, a gabled roof with the entrance from the east. An interior photograph shows that the walls of the courtroom were unpainted milled lumber originally. The ground floor appears, originally, to have had six rooms off a central hall. These have been altered over the years to the present three-room configuration.

Efforts to uncover documentary materials relating to plans and specifications and construction contracts for the courthouse have been unsuccessful to date. However, photographs show the 30 by 40-foot frame courthouse with a sawed log jail located to the south of the building. The courthouse was sided with "rustic" or drop siding. Placement of windows and doors does not appear to have changed, although several original doors are missing and the porch on the First Avenue facade has been removed. The old shingle roof is still evident beneath the present metal roof.

In December 1910, the jail was destroyed by fire and a process of altering the ground floor rooms in the courthouse began. In January 1911, a room used by the jail guard became a temporary jail and to this date the jail remains in the courthouse building.

In 1912, Deputy U.S. Marshal John Robinson advised H. K. Love, United States marshal in Fairbanks, that the courthouse had not been painted since 1901. He requested funds to do so⁶. He was turned down then, but in 1916, painting was under way on the exterior.

⁶Robinson requested 100 pounds of white lead, 25 pounds of ochre, 18 pounds of oil, 16 pounds of metallic red, 1 pound of Prussian blue, 1 pound of drop black and 5 gallons of turpentine to paint the courthouse.

A 1912 letter from Marshal Love to Robinson advised the use of the two front rooms flanking the hall as offices for the United States commissioner and the deputy marshal. The two rear rooms were suggested for use as jail cells for male and female prisoners. At this time, the chief clerk of the Railway Mail Service also maintained an office in the courthouse.

At various times, apparently, space in the courthouse was rented for post office use. The only specific reference to this, however, is in 1918, when two rooms were rented for the post office. It appears that these were the two rooms on the north side of the building.

The courtroom, located on the second floor, was always approached from a rear outside stair and there is no evidence of an interior staircase having existed. While the jury box and other courtroom elements to the east of the rail separating the bench from the gallery have been repositioned, the courtroom has been minimally altered. Interior walls have been painted and the exterior stair has been rebuilt and is different from the original.

In 1951, the U.S. commissioner was removed from Eagle and the building officially ceased to function as a United States courthouse. It has subsequently been transferred to the town of Eagle.

The courthouse was repainted in 1960 by the town of Eagle, white on the exterior with dark green trim. First-floor rooms on the south side of the building have been converted to use as the Eagle Public Library, the rear north room continues to function as a temporary jail and the two remaining north side rooms are used for storage. The courtroom is used for museum purposes, tied to the programs of the Historical Society of Eagle to interpret the history of the community to visitors.

Condition

Investigation of the courthouse in July 1975 revealed general foundation deterioration. Selected excavations along foundation perimeters indicated the need for total replacement of all elements at or below the grade line. The west two-thirds of the building showed significant decay to floor joists and in several areas, flooring was badly deteriorated as well. Deterioration to flooring at the second floor was localized to areas beneath chimney openings.

Exterior siding, while weathered, was found in generally good condition. Drop siding at or near grade was deteriorated and sawdust insulation, wetted by soil contact, contributes to the deterioration.

The southeast section of the attic has been damaged by fire, and rafters and trusses there are in poor condition. Otherwise, the rafters and trusses are generally in sound condition. The roof is metal over an earlier shingle roof and appears sound. Exterior windows and doors are in need of repair and windows generally require reglazing.

The second floor has a pronounced hump in the center, principally caused

by deterioration to foundation perimeters and consequent settling. The east door appears to have been altered from its original appearance and the northwest door is in poor condition and may require replacement, certainly extensive repair.

First-floor interior partitions have been altered or removed. Originally, the south half of the courthouse consisted of three rooms separated by partitions, the front two rooms connected by a door centered in the partition between them. Each room had a door to the central hall and the rear room had its own exterior exit. The west exterior wall has been altered at the first-floor level adjacent to the southwest room. The partition between the northeast and north rooms has been partially removed, although the door between these rooms is in place. The northwest room has been substantially altered for use as a jail cell. The present cell door probably was the hall door of the northeast room and has been altered for use as a cell door.

Recommended Treatment

In the absence of good documentation other than photographs, total restoration would be reluctantly suggested. It is possible, however, to restore the exterior of the building to its original appearance. It does not seem that interior finishes can duplicate original appearance without further documentation.

1. The building should be raised and all deteriorated foundation materials, joists, subflooring and floors removed. This will require removing the library and the jail from the building at least temporarily. At the time the building is raised, a permanent crawl space should be excavated beneath the courthouse, maintaining the existing west-to-east slope and providing adequate drainage at the east of the building. A new foundation constructed of concrete should be established and deteriorated siding, joists, subfloors and floors replaced. All wood members should be pressure-treated with pentachlorophenol and existing retained members should be surface-treated with the same. A visqueen soil cover should be placed between concrete, soil and wood elements. Insulation should be placed between all floor joists.

2. The metal roof should be removed and old shingles stripped from the roof. It was not possible to examine the shingle roof. If original material can be saved, it should be retained and reused. The southeast roof, which was damaged by fire, should be removed and rebuilt. New metalbestos chimneys should be installed in all chimney openings subsequent to reshingling the roof. All replacement shingles should be treated and fire-retardant.

3. Existing sawdust insulation should be removed between all interior and exterior walls. Sawdust is both a fire hazard and a contributor to deterioration of walls, foundations and siding. It should be replaced by modern insulation at both first and second-floor levels. The second-story ceiling should be insulated from the attic.

4. All doors should be repaired where possible and replaced where necessary. Replacement doors should duplicate original doors in detail.

5. All windows should have repairs made to sash and should be reglazed. Storm windows and storm doors should be installed over original doors and windows for winter use. Doors and windows should be repainted duplicating original paint colors.

6. Interior partitions should be installed at their original locations, duplicating original materials and appearance. New stoves and interior chimneys should be installed and connected.

7. All rooms should be wired for electrical service, including the courtroom.

8. The courtroom should be restored to its original appearance.

9. The east porch should be rebuilt based on photographic evidence to its original appearance and the public notice board placed in its original location. The west stair to the courtroom should be rebuilt to its original dimensions.

10. All exterior members should be pressure-treated with pentachlorophenol if new and surface-treated if existing.

Well House

History and Description

In 1902, a town well was dug in Eagle, near the site of the courthouse. The well was completed by mid-1903 and Howard and Jesson were awarded a contract to build a well house over the town well and pump; the structure was completed in October 1903.

Six years later, the town elected to enlarge the well house, and in September 1909, specifications were developed and then amended in March 1910. The specifications provided for a building 20-foot square at the base with eight-foot tapering walls to a 17-foot 2-inch square. From that point the walls would rise an additional 12 feet perpendicular to a total height of 20 feet. The roof was to be a hip roof with a 21-inch rise. The building was to be covered with rustic (drop) siding and the interior ceiling insulated with sawdust.

The east facade would have a three-foot by seven-foot door and two ground floor windows would be installed on the east and south facades.

The water tank would be installed on supports inside the building eight feet above the floor. The old well house was removed and was later to be placed to the north of the proposed windmill tower (in fact, it was attached to the north face of the new well house).

In the fall of 1909, the town purchased Johanson's old sawmill for \$500, to reuse its siding in the construction of the well house. After some deliberation, the city council determined that to purchase the required 13,000 board feet of lumber from Dawson would be prohibitively expensive and the better course was to use lumber from the old sawmill. The distinction between the

siding of the old well house and the new is easily seen. O. H. Walters received the contract to construct the well house, and it was completed in July 1910 at a total cost in excess of \$3,000.

The windmill and tower were erected and the redwood tank put together and in place with considerable difficulty. It was larger than ordered and some felt, at capacity, too great a load for the rest of the structure.

The old well house was attached to the north side of the new building and has served as a fire house for Eagle for the past 60 years.

Finished in 1910, this building has received constant attention from the city. In 1913, the belfry was erected on the well house and the fire bell installed. The building was given a fresh coat of white paint. In 1915, a concrete liner was placed on the floor of the well house, and the building was repainted in 1922. It has been well maintained and regularly repaired because it is the most vital public building in the city being the source of Eagle's municipal water, although some residents now have private wells.

Condition

The well house is essentially in sound condition. The principal concern is the capability of the building structure to support the water tank when filled to capacity. While supporting posts can accept the vertical load, the lateral strength of the well house is suspect.

Treatment

Principal work consists of stabilizing foundations where they may have deteriorated and structurally reinforcing the building to allow maximum use of the water tank. At the same time work is done on the structure, a new metal-bestos chimney should be installed, storm windows installed and the building repainted duplicating its original colors.

Custom House

History and Description

The custom house was originally constructed in 1900 as a 16-foot 4-inch by 36-foot 4-inch two-room, one-story, frame NCO quarters (building no. 18) at Fort Egbert. In 1902, the building was enlarged to a five-room quarters duplicating building no. 19. Prior to abandonment of Fort Egbert, a 10-foot by 14-foot one-story west wing was added to the two-story part of the house.

In 1915, this building was transferred to the U.S. Department of Treasury for use as a custom house. Subsequent to the transfer, the building was moved from Fort Egbert to its present location on Front Street. Precisely when the building was moved is not certain. Some persons have indicated that the building was moved to Front Street in 1918. However, the argument can be made circumstantially that it was moved in the summer of 1915.

In 1915, J. J. Hillard, the U.S. customs agent in Eagle, asked permission to run a pipeline from the well house to the custom house on Front Street. Simultaneously, John Powers asked permission of the city council to move a building on to Front Street and locate it next to the Ott and Scheele Store on Front (location of the present custom house).

At the time the building was moved, its floor plan was altered. The one-story south wing was moved and attached to the west facade of the two-story building, and the former one-story west wing was subsequently attached to the old south wing.

Judge Wickersham reported that Eagle had a custom station as early as 1900. There are references to the custom house being located on lot 14, block 18, during the period 1902 to 1905 in a building owned by the NAT & T Company called the Exchange Company Building. Eagle city council minutes for September 1906 refer to "the present custom house," but without reference to location. By 1909, George Woodruff was the customs agent in Eagle. It is probable that the customs station was located in his store (People's and Woodruff) at the corner of Front and A streets. By 1911, J. J. Hillard was the customs agent.

In 1968, the city received the old NCO quarters (custom house), but not title to the land. It has subsequently served as the museum of the Historical Society of Eagle.

Typical of wood structures in Eagle, this building suffers from general foundation deterioration resulting from direct soil contact. Moreover, when moved, the sections of the building do not appear to have been properly aligned and joined. Some deterioration is evident at the intersection of the wings. The rear wing is in a general deteriorated condition.

Treatment

The building should be raised and a crawl space excavated and drainage established. Foundation members and deteriorated joists should be replaced and the building realigned on a new foundation. A soil cover should be placed between concrete or soil and wood materials. All wood should be properly treated to arrest further deterioration.

Floors and attic spaces should be insulated and windows reglazed. The present metal roof should be replaced with shingles. New metalbestos chimneys should be installed and the building repainted.

City Hall

History and Description

Prior to the incorporation of Eagle City on February 9, 1901, the community had no official local government. One of the first actions of the new city council in April 1901 was to establish a city hall. The council noted that a cabin on C Street near the church was available. The cabin's dimensions were about 16 feet by 25 feet and it would require some improvements before use. The city council agreed to purchase sash for both of the window openings (a third window has been added since), rechalk the logs with moss, place dirt

insulation on the roof and acquire a table, eight to ten chairs, a stove and two or more lamps to make the building useable. (The chairs still used by the council are the original chairs purchased in 1901.)

June 10, 1901, the council met for the first time in the new city hall. The council met in the city hall during the warmer months, but in the early years they met in the court house or the NC Company store during winter.

The Eagle City Hall is a log structure. Its present roof is of metal, apparently with dirt insulation. Minor changes have been made to the building over the years, as recorded in council minutes. A third casement window was added to the north facade to the west of the entrance door, the interior ceiling has been replaced by a particle board ceiling, and the building has been wired for electricity.

Condition

The building conditions approximate those of other Eagle and Fort Egbert structures. Side walls of the building have been banked with soil and are deteriorated. It is suspected that floor joists and some flooring are also deteriorated. The entry door and window sash need minor repair. Conditions above grade appear sound. The condition of the roof has not been evaluated.

Treatment

As should other buildings, the city hall should be raised and a permanent crawl space excavated, providing for adequate drainage. Lower logs and floor joists that are deteriorated should be replaced with chemically treated materials. A visqueen soil cover should be placed between soil and wood materials. All wood above grade should be treated with a surface application of pentachlorophenol. Windows should be repaired and reglazed and the entry door repaired. New storm windows and a storm door should be constructed and installed.

Taylor Building

History and Description

The Taylor building was constructed by the NC Company before 1905 and originally served as an NC Company store. In 1915, the NC Company closed one of its Eagle stores and in 1916 Robert Beggs was running a restaurant at the location of the store. A late 1910 photograph confirms that the building was being used as the Merchant's Cafe. It does not appear that the building had passed out of NC Company ownership, however, for as late as 1950 it was serving as a store of the NC Company. In 1968, the property was deeded by private parties to the town of Eagle for use as a civic center.

The Taylor building is one of Eagle's best architectural examples and one of the few surviving historic commercial structures.

Condition

The foundations of the Taylor building were found to be in a generally

deteriorated condition. Wall surfaces, while in moderately good condition, have localized areas of advanced decay. The roof appears to have some leaks and glazing in the windows is in disrepair.

Treatment

Since an ultimate use for the building has not been determined, immediate stabilization to prevent further deterioration is recommended. All openings admitting water to the interior should be closed to prevent further decay. Roof leaks must be patched, missing window glass replaced and doors repaired and secured in the immediate future.

In the long term, foundations will require almost total replacement. Joists and flooring will be generally salvageable, since the building has a basement. The roof and decayed exterior siding should be replaced.

PRIORITIES

1. First priority has been placed on restoration of the United States Courthouse in Eagle and plans have been made for its restoration during 1976.

2. Stabilization and repair of the well house is clearly a high priority. Because the well house serves a vital function in Eagle, its repair is critical.

3. While the custom house and city hall have sustained moderate deterioration, both buildings are in better repair than the Taylor building because both are in use. Stabilization of the Taylor building to prevent further deterioration is important. Securing the building from moisture penetration should be undertaken in 1976, if possible, and not later than 1977. Foundation stabilization should be undertaken within the next several years. Restoration or rehabilitation should be delayed until a use is found for the Taylor building.

4. The custom house appears, based on brief examination, not to be in immediate danger of collapse or further extensive decay, nor does the city hall. However, the custom house should receive next priority, as its apparent deterioration is more extensive than that of the city hall.

5. The city hall appears to be the most stable of Eagle's public buildings and its stabilization and restoration could be delayed until after other, more deteriorated structures have been improved. Work required is less extensive and more easily accomplished than that on other structures, with the exception of the Taylor building.

POTENTIAL LEGAL TOOLS

Realizing that legal mechanisms that can be instituted by local government for the purposes of preservation have not been popularly received by either the Eagle city council or community residents, it may, nonetheless, be useful to discuss legal approaches for long-term future reference. Utilizing preservation and development guidelines included in this study as criteria for administering a local historic district ordinance, it may be possible to

implement preservation legislation successfully at a future date. The major problems of such ordinances most often result from a lack of guidelines or criteria for determining whether proposed actions meet the intent of the ordinance. In the absence of criteria, decisions can tend toward the subjective and the arbitrary.

The goal of a historic district ordinance is the protection of the physical environment of a town, area or neighborhood for the purpose of preventing actions that might alter the historical and/or architectural integrity of the historic district. The means to that end necessarily assume certain controls over individual private (and public) property rights. The important thing is that any controls that are exercised are administered reasonably and equitably, that every property owner receives the same treatment under the provisions of the ordinance.

The Eagle city council and the people of Eagle clearly have some choices to make. The purpose of this study is to suggest possible courses of action that Eagle can accept, reject or modify. It is not the intent of this report to attempt to impose decisions on Eagle. It cannot be stated strongly enough that the report is a series of suggestions. Decisions on appropriate courses of action can only be made by the people of Eagle.

Eagle can decide that no action should be taken to exercise reasonable (and legal) limitations on the size, type and location of new development. If that is the decision, Eagle should be prepared to accept the fact that change in the character of the town will continue, and will diminish its historic, aesthetic and potential economic values. It should be acknowledged that certain change is inevitable, but each community has some opportunity to determine whether negative changes go unchallenged or whether change will be channeled in directions that enhance the appearance, as well as the economy, of the community.

Some communities have elected to implement limited provisions to encourage the preservation and enhancement of historic community character. Generally, such provisions tend to be advisory and moral influences, based on a statement of public policy by a city council, in the form of an ordinance or resolution, that the preservation and enhancement of the historic appearance of the community is in the public interest and should be supported by local residents. Resident and nonresident property owners could be supplied with guidelines and criteria for both rehabilitation and new construction and encouraged to build or rehabilitate within the constraints of the guidelines, although the guidelines would have only the force of moral, not legal persuasion. Such a course of action could be strengthened by officially (and legally) designating specified areas for commercial development as distinguished from residential development. Within the commercial area, the city might want to provide for somewhat stronger limitations on the size, scale and appearance of new commercial developments.

A third approach, and one used in a number of small and large communities in the United States, would be the establishment by law of controls on rehabilitation and new construction, both in commercial areas and within residential areas. Such controls could, and in some instances have, placed controls on the demolition of buildings that are important to the historic character of

the district as well as controls over restoration and rehabilitation and the appearance of new construction. In this instance the objective is to take all possible legal measures to assure that any development action within the community will not adversely affect the integrity of a historic area.

If requested, the National Trust for Historic Preservation would supply the Eagle city council with examples of various historic preservation ordinances that might be helpful in drafting an ordinance for Eagle. The National Trust could also provide some assistance, if desired, in reviewing any proposed draft ordinance and in offering suggestions for possible revisions.

It is recommended, given the special historic importance of Eagle and the significance of older buildings, open spaces and the potential impact of newer buildings to the historic character of Eagle, that action be taken to assure that Eagle retains its older buildings, constructs compatible new buildings and does not lose its historic and architectural integrity.

Ideally, Eagle should institute a historic district by ordinance and establish two specific commercial zones, one conforming to the old commercial area and one outside the limits of the original town of Eagle. Strong limitations should be placed on commercial development in the old commercial area and more limited controls should be placed on those developments within the secondary area. At a minimum, it is recommended that the Eagle city council establish specific commercial zones by ordinance and also that the council establish an ordinance stating, as a matter of public policy, that the preservation of Eagle's historic buildings and historic appearance is in the public interest. As a matter of policy, every present and future property owner should receive copies of rehabilitation and new construction guidelines with strong encouragements to follow the guidelines and criteria in both rehabilitation and new development. The Eagle city council and the Historical Society of Eagle should consult with property owners and encourage at least unofficial review and discussion of any proposals for new construction or rehabilitation of existing buildings. Every effort should be made, officially or unofficially, to discourage demolition of older buildings contributing to the historic appearance of Eagle.

POTENTIAL SOURCES OF FUNDING ASSISTANCE

The following are possible sources of financial assistance that Eagle might call on to help finance public and private restoration and rehabilitation of its older buildings and, in some cases, construction of new buildings.

1. National Register of Historic Places.

In 1970, the Eagle Historic District, including the town of Eagle and Fort Egbert, was placed in the National Register of Historic Places maintained by the National Park Service, U.S. Department of the Interior. Individual properties listed in the National Register and properties within historic districts that contribute to the historical significance of the district are eligible to receive 50:50 federal matching grants-in-aid through the U.S. Department of the Interior for acquisition, preservation and restoration.

These funds are administered in each state by a state historic preservation officer designated by the governor. In Alaska that person is the director of the Division of Parks.⁷ The director is responsible for administering the program.

A grant of \$25,000 has been allocated through this program for stabilization and restoration of the Eagle courthouse, the work to be accomplished in calendar 1976. Through the program, additional properties, both in public and private ownership, could be eligible to receive assistance.

2. U. S. Department of Commerce, Economic Development Administration.

Through the Economic Development Administration, funding assistance is available in the form of both loans and grants where development projects might have a significant impact upon unemployment and underemployment. With the potential for increased tourism, funds could be used for acquisition, restoration or rehabilitation of older structures where new uses related to tourism might provide additional employment opportunities.

3. Small Business Administration.

Through the Small Business Administration, funds could be available, largely in the form of loans, for the development of new businesses or expansion of existing businesses. While the likelihood of substantial assistance through this program is limited, it is a possibility.

4. State of Alaska.

The state of Alaska, through the state legislature, has appropriated funds to match federal assistance for the restoration of the Eagle courthouse. The long-term potential for additional state legislative support should not be overlooked. Also, through the Department of Community and Regional Affairs (Pouch B., Juneau, Alaska 99801) limited planning assistance grants may be available for additional planning work the town of Eagle might wish to carry out in terms of historic resource development.

5. Local government.

While the financial resources of the town of Eagle are limited, provisions could be made that would help to finance some restoration and, certainly, maintenance of the city-owned historic buildings. The town of Eagle could institute a \$.50 or \$1.00 bed tax that would affect out-of-the area overnight lodgers at existing or future facilities. It would not affect Eagle residents and, given present limited facilities, would not affect visitor use of facilities. Funds from the tax could provide the basis for long-term historic building maintenance without requiring the use of limited existing community resources.

6. Private resources.

Because of the significant nature of Eagle, we believe that private resources, individual and corporate, are additional sources to support

⁷Russell W. Cahill, director, Division of Parks, Department of Natural Resources, 323 East Fourth Avenue, Anchorage, Alaska, 99501

preservation in Eagle. Private individuals, in and out of Alaska, private foundations and corporations all could be solicited to support preservation projects in Eagle. Such funds could be used for future restoration of publicly owned buildings, such as the well house, city hall, custom house and the Taylor building. Private funds could be used to match any future grants through the National Register program. Possibly, such funds could also be used to establish a local grant or loan fund for restoration or rehabilitation of privately owned historic buildings. Funds could be used in one of several ways.

Loans could be made at low interest for a short term to restore or rehabilitate older buildings. In exchange for availability of funds, the city could require that individuals follow rehabilitation guidelines and that they would not make any subsequent alterations without approval of the city council for a specified period of time after repayment of the loan.

Financial assistance could be made available for restoration or rehabilitation in the form of grants, in exchange for which property owners would transfer certain property rights ("exterior easements") to the town of Eagle in perpetuity. In essence, the city government would be using funds to acquire limited interests in property with the provision that the property owner must use the funds to restore or rehabilitate his historic building. In exchange for the funds, the property owner would agree not to make any exterior changes to a historic property without the written consent of the city council. The city council could also require that changes would have to follow rehabilitation guidelines and criteria. Such agreements have commonly been used elsewhere for historic preservation purposes. The agreements are written into the deed and they bind future owners of the property to adhere to them. Because the owner voluntarily agrees to share certain property rights, in essence by selling limited interest in his property to the town of Eagle, it can serve as a supplement to limited historic district controls by ordinance and, perhaps, as an alternative to strict historic district controls for rehabilitation (although it will have less effect upon new construction).

Based on the 1975 summer experience with foundation work at Fort Egbert and on the assumption that most older buildings in Eagle will have similar foundation deficiencies, it is estimated roughly that approximately 50 old buildings would require an average of \$4,000 each to replace foundations, repair floor joists and floors and make repairs to roofs, doors and windows. As a loan fund, it should have a capital goal of \$100,000 and \$200,000 if used to acquire exterior easements. The total estimated cost to finance rehabilitation and restoration of private buildings and publicly owned structures is between \$300,000 and \$350,000.

Figure 30. Eagle was laid out in a grid with the commercial area near the waterfront and the residential area farther back from the Yukon River. Over the years much of the grid pattern of Eagle has been lost. (Volz)



Figure 31. Commercial buildings on B Street were oriented to the street frontage, with gable walls facing the street. The log structures on the left feature the two typical roof treatments of such buildings in Eagle--one with a projecting overhang, the other without. (Scott)



Figure 32. Although several metal buildings were built, like the NC Company warehouse no. 3, the traditional building material on Front Street was wood frame. New construction should maintain the tradition of frame structures on Front Street. (Scott)



Figures 33 a and b. Windows in the gable walls of Eagle's log cabins are either double-hung sash with six-lights-over-six, as shown in cabin with the overhang (a), or three-lights-over-three casement windows, as shown in cabin without the overhang (b). (Scott)

Figure 34. Log houses often had one or more rear additions. Side facades and additions had either double-hung sash or casement windows. (Scott)



Figure 35. The new Eagle Post Office, built of tongue-and-groove logs, relates well to Eagle's older log buildings. (Scott)

Figure 36. This new log cabin relates well to the traditional design elements of Eagle's older log houses. (Scott)





Figure 37. While appearing to be a frame structure, this building is made of log with drop siding. (Scott)

Figure 38. The Amundsen cabin is actually built of logs that were later covered with siding. Its basic form is more that of a log structure than a frame structure. (Scott)



Figure 39. Eagle's frame houses also have gable roofs and face the front property line. The entrance is located in a gable wall and is usually flanked by one or two windows, commonly double-hung sash. Most of the houses are one and one-half stories high. (Volz)

Figure 40. A frame house often has a shed roof porch with an enclosed winter entrance. (Scott)





Figure 41. The old Abraham Malm house is one of Eagle's notable frame houses. (Note camper top in front for size comparison.) (Scott)



Figure 42. Although a newer structure, the Biederman General Store relates well to older Eagle buildings in size, scale, and color. (Scott)



Figures 43 a and b. Large panes of glass should not be used in new buildings on B Street. The total area of glass should be divided by vertical and horizontal muntins similar to those in the Taylor building (left), or the NC Company store (right). (Scott)



Figure 44. This building is one of two remaining false front structures in Eagle and the only historic building surviving in its block. Preservation of the structure is critical. (Scott)



Figure 45. Today the courthouse stands without its porch and the building is used as the Eagle Public Library, a temporary jail and a museum. Plans call for its restoration in 1976. See Figure 13 for comparison. (Scott)

Figure 46. As the courthouse settled and its foundation deteriorated, discarded logs and lumber were used beneath sills and joists to support the structure. (Volz)



Figure 47. Supporting timbers of the courthouse were totally deteriorated and will require replacement during restoration. (Volz)



Figure 48. The well house and windmill, built in 1910 at a cost of \$3,000, have served as the principal source of Eagle's municipal water supply for more than 65 years. (Volz)

Figure 49. The Historical Society of Eagle building was built in 1900 and altered in 1902 for use as an NCO quarters at Fort Egbert. In 1915 the house was moved to Eagle and became the custom house until it was adapted for its present use. (Scott)



Figure 50. Since 1901, this structure has served as the Eagle City Hall. It still contains much of the original furniture. (Scott)

Appendix

BUILDINGS THAT CONTRIBUTE TO THE CHARACTER OF THE EAGLE HISTORIC DISTRICT (OLDER BUILDINGS ONLY)

National or State Significance

Courthouse (block 4, lot 1)	Wickersham House (block 3, lot 10)
Eagle City Hall (block 1, lot 9)	Old Custom House (block 2, lot 1)
Amundsen Cabin (block 2, lot 10)	

Buildings of High Local Significance (Historically or Architecturally)

Episcopal Church (block 1, lots 11/12)	Log House (block 6, lot 1)
Old Schoolhouse (block 1, lot 10)	Log House (block 6, lot 8)
Taylor Building (block 2, lot 4)	Red Men Hall (block 7, lot 8)
Old NC Company Store (block 2, lot 13)	John Powers House (block 10, lot 1)
Old NC Company Warehouse (no. 3) (block 2, lot 14)	
Clyde Thompson Building (block 18, lot 1)	
Elmo Stout Residence (block 3, lot 5)	John Powers Barn (block 10, lot 4)
George Beck Residence (block 3, lot 9)	Eagle Schoolhouse (School Reserve)
Anton Merley Cabin (block 3, lot 11)	Eagle Pump House (block 4, lot 1)
Old Roman Catholic Church (block 4, lot 4)	
Eagle Roadhouse and Storage Building (block 17, lot 12)	
Log House (block 17, lot 7)	Hansen House (block 2, lot 9)

Buildings That are Visual Contributors to the Eagle Historic District

Episcopal Church	Cabin (block 8, lot 4)
Log House (block 1, north 2/3 lot)	Frame House (block 12, lot 11)
Frame Building (block 1, south 1/3 lot)	
Biederman General Store	House (block 15, lot 3)
Log House (block 2, lot 6)	House (block 15, lot 6)
Log Building (block 2, lot 7)	Two Houses (block 16, lot 5)
Log House (block 2, rear of lot 9)	Log House (block 16, lot 11)
Frame House (block 3, lot 1)	Log House (block 17, lot 4)
Frame House (block 3, lot 2)	Log House (block 17, lot 9)
Frame House (block 3, lot 4)	Log Cabin (block 18, lot 2)
Log House (block 3, lot 7)	Log Shed (block 18, lot 6)
Frame House (block 4, lot 3)	Log Building (block 20, lot 5)
Log House (block 4, lot 11)	Log House (block 24, lot 1)
Log House (block 4, lot 12--despite alteration)	
Cabin (block 6, lot 11)	Frame House (block 24, lot 3)
House (block 7, lot 8)	Log Cabin (block 24, lot 8)
Cabin (block 7, lot 1)	Frame House (block 24, lot 11)
Cabin (block 8, lot 12)	Log House (block 25, lot 7)
Cabin (block 8, lot 3)	Black House (block 26)

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